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COTTON

FROM

SEED TO LOOM.

A HAND-BOOK OF FACTS

FOR THE

Daily Use of Producer, Merchant and Consumer.

BY

WILLIAM B. DANA,

Editor Commercial and Financial Chronicle.

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CHAPTER I.

COTTON FROM SEED TO LOOM.

INTRODUCTORY.

The efforts of merchants to acquire facts, so as to be able to forecast the future of markets—Cotton crop estimates still, however, unreliable—This is a result of imperfect observation—Illustrated by error with regard to spinners' consumption—Estimates, to be useful, must take in the whole growth—If simply founded on fall appearance, they are of no value—Early or late frost of much less importance than many think—What is the secret of a full yield—The effect of a good and a poor stand on the fruitage of the plant, &c.—Other features of the book.

The merchant and manufacturer in all their business ventures must depend, in some measure at least, upon facts not yet accomplished. Hence, each is unceasingly seeking to outstrip his neighbor in acquiring information, through which he may obtain a better forecast of the future. In the search, every market has its scouts out in all directions; you meet them, for instance, in the extremes of South America, the plains of India, the tea-fields of China, tapping the very sources of supply. The unobserving sometimes think that it is the mere turning of the kaleidoscope that has fixed the events which have responded with such perfect nicety to the plan put in execution months ago. They do not see the method, but the result only, and therefore call that good fortune which is simply the legitimate fruit of vigilance.

While, however, in every industry, so much is depending

upon a right conception of coming conditions, and efforts so persistent and painstaking are put forth to get at even an inkling of their significance, it is truly surprising that so little advance has been made in solving or limiting the doubts with regard to cotton supply. Every year we pass through just the same round of confusion, uncertainty and suspense. And yet the growth and fruitage of a plant is an assured process, and as capable, with fixed conditions, of being foreshadowed as the motions of the planets. All that is required are undisputed facts to base our conclusions upon. With past experience and conditions accurately given, future results could not be doubtful. The weak point in the problem, and the only doubtful one, would arise from imperfect observation; and that is almost wholly the result of unnecessary ignorance.

By unnecessary ignorance we mean simply to indicate the omission during past years to keep a perfect record of facts as they transpired. A very good illustration in another department of the same trade has been furnished within a short period through the figures for European consumption. The deliveries to spinners have been for a long time regularly and carefully preserved and studied, but not so spinners' stocks, the deliveries until recently being understood by the general reader as the measure of consumption. This error was the prime factor in most of the disasters to the cotton trade for many years. Four evident truths were thus ignored or only partially accepted: (1) That consumption for spinning purposes cannot exceed the spinning capacity of each country; (2) that the spinning capacity cannot be enlarged faster than the spindles can be made and set up; (3) that such increase in spindles can only progress at a certain ascertainable rate per month, and will not go on to any extent when the goods trade is not profitable; and (4) that spinners naturally stock up

when crops are abundant and prices low, and run on that stock when supply is short. The opinions of those who insisted upon the truth of these propositions during the years of 1871 and 1872 were thought faulty, and therefore were not accepted until in the summer of 1872, when, in spite of our very small crop, there was a wonderful abstention from the market on the part of spinners, and it was then found that there was a supply which had been invisible, and that deliveries and consumption were by no means synonymous; so a much closer observation and analysis of the conditions began to be made, and at this date spinners' stocks of raw cotton are followed as vigilantly as the deliveries, or even more so.

We use this piece of history simply as an illustration. The experience of that year and the facts which subsequent investigations have brought out, have greatly simplified the problem of consumption. Yet we daily need more light even in that direction. Our information, to meet the requirement, must be aggressive, the result of incessant research. In this spirit we have endeavored, in subsequent pages, to push this inquiry with regard to the future spinning demand one step further, by figures and suggestions which will, we think, prove timely.

But that portion of our work is secondary. Our first and main effort has been directed to elucidating the question of American supply, and here we have been compelled to explore in a field almost new. Not that there has been any want of reports of the condition of previous crops, faithfully made from month to month; but simply that such reports of themselves prove nothing, or, if followed, lead us anywhere but to the truth. This is not said in a spirit of criticism. If any one questions the assertion, let him read through a few years of such compilations, and it will be found that they are a mass of contradictions, and

one will rise from the task simply bewildered. In a certain year it will be stated that drought has reduced the crop fifty per cent, or that rain has had the same effect, or that shedding has utterly ruined it, or that caterpillars have eaten it up; and yet in those years, perhaps, and in those very States, there would be an abundant yield. On the other hand, another season, the very same summer and fall conditions may be apparent, and the same results predicted and prove nearly correct. How can these statements and results be reconciled? Not by pronouncing one informant false and the other true. They both stated what they saw, and intended to represent the condition faithfully. Neither had studied the lessons which the cultivation of past crops might have taught them; their report in each case was simply a reflex of the outward appearance at the moment.

And in this connection we might as well note the fact which even the most cursory examination discloses, that no man can estimate correctly the extent of a cotton crop from its appearance in the field in any fall or summer month. This point is very important, because in the misconception with regard to it lies the great error of estimates. Planters of even thirty years' experience, in making the attempt, have at times varied over fifty per cent from the actual yield. Many amusing illustrations of this could be given. We remember one of a farmer who, to use his own expression, "planted for forty bales." On a Sunday in August some of his neighbors paid him a visit and, as their custom was, went out to look at his crop. All pronounced it sure for fifty bales. Later in the month the plants began to shed, and the half-ripe bolls seemed literally to rain upon the ground, while the leaves drooped under the scorching sun as if utterly discouraged, no doubt imparting a like feeling to the beholder. Not twenty bales would that field pro-

duce, was the unanimous, unhesitating verdict of these same sage judges; and they believed it so fully that the farmer immediately told his family to purchase nothing more at the grocer's, for his cotton was a failure. Late in September our friend wrote that his crop was actually turning out better than he expected, and he should not wonder if he made thirty bales. In November he wrote again, saying he had picked thirty-five bales, and hoped to secure four or five more. When the season closed, his final report showed a total yield of forty-one bales. This is not an exceptional case. It represents the blunder of every person who attempts to draw a year's results out of a day's experience—not unlike the endeavor to describe the history and achievements of a long war by an instantaneous photograph at a set moment in the progress of one battle.

The first assumption of the careless observer, after studying the above case, will be that the extra yield was the fruitage of a new growth. Belonging to the same class of hasty conclusions is the remark, frequently heard, that if frost holds off for ten days it will be five hundred thousand bales added to the crop, and some, not to be outdone we suppose in romancing, make it a million bales if the frost will grant thirty to sixty days' grace beyond an average. In other words, the opinion of these wise men is that the frost is the arbiter of the yield. This is a very mistaken notion, for a healthy, regularly-developed cotton plant, like every weed or shrub, has a fixed growth, with a limit to it, ending in maturity. The date, therefore, when vegetation is killed, has very much less to do with the result than most imagine, for all the fruit the plant can carry will have been previously perfected. In 1875, ice formed at Memphis (see CHRONICLE of October 16, 1875, page 375.) on Monday and Tuesday nights, the 11th and 12th of October; the Mem-

phis Cotton Exchange report issued in November states that, out of all their correspondents in Tennessee, Mississippi and Arkansas, being 154 in all, eighty, or more than one-half, "report a killing frost from the 9th to the 20th "of October, the average date being October 14th." And yet, notwithstanding frost came so early, Memphis received of the crop of that year 487,376 bales, being over 160,000 bales more than in the previous year, and over 100,000 bales more than in 1871-2, when the date of frost was November 17, the very latest in that district of any year in our record. Certainly there was something in the growth of the summer of 1875 which even an early killing could not destroy; and when we come to consider the weather data of that autumn we shall also find that even floods of rain, equal to those of 1877 at very many points, had not their accustomed power over it.

It was not, therefore, out of a second growth, as it is called, nor out of a prolonged autumn, that our friend secured so good a crop. All he ever knew or understood was that he made it, and from plants that about the first of September looked to him and his friends, in every particular, like those of a previous year which proved a failure. And in that apparent contradiction between results and conditions lies the very point upon which we desire our investigations to throw light. (We call cotton a dry-weather plant, and so it is; but the drought it passes successfully through one year will perhaps almost kill it the next. It is said that rain is its destruction; and yet a crop is often made of surprising proportions which has endured just such floods of rain as another crop succumbs to, of apparently equal promise. To test, therefore, all our conclusions relating to these matters, we need facts which shall reflect past experience through a series of years, from the first ploughing of the field to the picking of the last boll; and

we need to apply such facts to the nature, habits and production of the plant, so as to bring out as far as possible the reasons for the failure and success of different crops during those seasons.

This is what we have attempted to do in later pages. As a preliminary, however, we have investigated anew the problem of acreage, showing and proving its growth or progress in the past and its extent and production during recent years, thus giving the data for determining the outside limits or possibilities of any season. After that, follows a detailed account of the routine in cultivation during the first six months; this includes a recital of the methods of preparing the soil, planting the seed, working the crop, with a history of the early growth, the diseases and dangers encountered at that period, and the nature and kind of labor necessary in securing a stand. This detail may at first sight appear unnecessary, but is really the basis of our inquiry, as these facts, disclosing the weaknesses and strength of the cotton plant, prepare us to study and understand the data subsequently given of weather and growth while passing through these many stages of development, thus enabling us to determine with great accuracy the effect of certain peculiarities of weather and the reasons for it, and also what has been the precise condition of the several crops on the first of July. In subsequent chapters we similarly analyze and examine the last six months of each year.

Young life is synonymous with weakness and frailty. All plants then need nursing, protection, cultivation. Every faithful gardener watches over and tends his seed when once planted; if the weather is dry, he waters it; if cold, he covers it; if wet, he protects it. And when the little shoot has pushed above the ground, his care increases lest insects shall pierce or weeds choke or rain blight the

tender growth. He could omit much of this labor if he were content in getting only sickly plants, irregularly established. His aim, however, is to secure an abundant crop, which he knows is only attainable through a perfect early development; but when such a development is gained, he considers the time of trial and doubt passed, the harvest assured, and the plant almost able to take care of itself. Is not this, in vegetable life, the universal experience? Of course, in extensive cultivation, with acres of corn or cotton, no such nursing is possible; the gardener secures a crop always, because, in his limited domain, he can constantly supply the deficiencies or irregularities of nature; the farmer, however, is in bondage to the weather. If it is so dry his seed does not germinate, he cannot water it; if too cold, he cannot cover it; if excessively wet, he cannot protect it. So, also, when the plants are up, they need care and cultivation, but can receive it only if the weather permits. Consequently, his crops will sometimes be well started and sometimes poorly started. And precisely here lies the point of first interest. The cotton plant in June is brought to a stand; in suitable weather the stand is strong, clean and healthy; in unsuitable weather it is weak, grassy and sickly. The inquiry suggested is, how far does the stand or the condition on the first of July control the yield. Can a weak, sickly stand ever be cured? Does a strong, healthy stand, within any definable limits, guarantee a successful season? For answers to these questions, we must refer to the facts given; first, as to the early growth of the plant, next, with regard to the summer development and trials, and finally as to the maturing, picking and marketing of the crop. All the explanations and data included under these heads are needed to enforce the truth which the facts appear to disclose. After carefully studying them, the reader may find much less contradiction than heretofore

supposed between the conditions and results of different seasons. The ancients represented the Goddess Fortune blind-fold turning her wheel, now up, now down, and fixing the deepest events of life with fickle impulse and random hand. In our day, cotton-crop estimates have come to be considered as peculiarly under the supervision of this same divinity. We trust, however, that in the future this will be true to a much smaller degree, and that, when a few years more of accurate weather observations have been preserved, the ventures of the cotton merchant and manufacturer will be still less the football of blind chance.

The other features of this book it is unnecessary for us to refer to at any length here; they sufficiently explain themselves. With regard to India, however, we may say that our purpose has been to unfold another point in the cotton-supply problem which is but little understood. We believe the facts and figures we have brought together, will, with the help of the map of the cotton districts which we give, be found of frequent use. Next to America, India is likely, for a considerable time at least, to hold prominence as a source of supply, and hence we cannot fail to be interested in anything that helps us to measure that supply. The map, which is more fully explained hereafter, has been prepared under our direction for the purpose of supplying a want often expressed and widely felt to exist. Though not as complete in some of its details as we intended—and very likely containing minor inaccuracies with regard to the boundaries of some smaller districts—yet the information it does convey can be obtained from no other published source, and is of such a practical nature as to make it of special service to a large circle of readers. Whether the world's supply of cotton from India is to continue unchanged, or is to suffer decline or gradually to increase,

are points very frequently discussed, and—because there have been so few helps accessible to guide one's judgment—often without knowledge. May we not believe that for the future these and kindred questions will be more generally and clearly understood.

CHAPTER II.

COTTON CROPS OF THE UNITED STATES.

1621 TO 1877.

Cotton Tree indigenous in America—Cortes' present to Charles V., from Mexico—Cotton Plant first cultivated in Virginia, 1621—When in South Carolina; Georgia; Pennsylvania; Maryland; New Jersey—Louisiana and Florida invent machines for separating seed from fibre—Progress in cultivation to 1793—Exports, 1739 to 1793—Cotton Gin invented, 1793—Bowed Cotton—Inventions of Hargreaves, Arkwright, and Watt—Impulse given to Cotton production—Exports, 1791 to 1826—Crop in America from 1826 to 1877.

The wide subject of cotton supply may very properly be introduced by a summary of the production of cotton in America each year since its first cultivation in the South; such a review will, we are persuaded, be of general, and, to some extent, of practical, interest. Previous to 1826-27 there were no complete returns, either commercial or official. Pretty full statistics were prepared in October, 1825, and also in October, 1826; but with 1827 the figures became more detailed and exact. We begin, therefore, with that year our tables of the crop movement, which will be found on subsequent pages of this chapter. It will be noticed that from that date (1826-27) we give every result in each annual report down to the present year, 1876-77, so that the reader has before him, in convenient form, easy for reference, and covering the entire period mentioned—a full

half century,—(1) the receipts at each port; (2) the exports to Great Britain, France, and other countries; (3) the stock at the beginning and the end of the year; (4) the consumption in the North; (5) the consumption in the South; (6) the overland movement; (7) the other lesser items, such as the cotton burnt, exported to Canada by rail, etc. In each year's column, therefore, each bale is accounted for, and beginning with the stock on hand at the commencement of the year, we have, after adding the production and deducting the exports, consumption, etc., which appear there, a balance left, which is the stock at the close of the year.

For the period previous to 1826–27 we can do no more than to give the shortest possible summary of results. They have no practical interest, and hence do not come within the purpose of this book; but still, as in cotton matters we are all in one sense antiquarians, a brief historical review of the attempts and results of previous years will furnish a suitable introduction to the years when more exact statistics began, and such a summary is perhaps desirable to complete the record.

CULTIVATION FROM 1621 TO 1793.

Cotton was indigenous in America. It was found by the Spaniards when they discovered the continent, the Mexicans at that time using it very largely as an article of clothing. Clavigero, in his history of Mexico, states that Cortes sent as presents to Charles V. "cotton mantles, some all white, others mixed with white and black or red, green, yellow and blue; waistcoats, handkerchiefs, counterpanes, tapestries and carpets of cotton." Columbus also found the plant in Central and South America in great abundance, the inhabitants using it for clothing, and also for making fishing nets. It is presumed, however, that it was the cotton tree which was native in America, and

not the annual herbaceous plant now grown in the South. Ward in his "Mexico" speaks of the cotton tree propagating itself there, in the same chapter in which he refers to the advanced state to which the inhabitants had early carried the manufacture of the staple. He nowhere mentions the plant, but implies that the tree was their only source of supply of the raw material.

As to the cultivation of cotton in the United States, Virginia has the credit of making the first experiment. This original venture is generally credited to 1621. The seeds, which are supposed to have come from the West Indies, are stated to have been planted as an experiment, but the historian remarks that "their plentiful coming up was at that early day a subject of interest in America and England." It would seem, however, that very likely 1621 was not the first year of its cultivation, for in a list of articles growing and to be had in the Virginia colony in that year (1621), we find mentioned *cotton wool*, at 8d. per pound. It could scarcely have been for the first time planted, grown, cleaned, and got into a price list all in the same nine months, at a period of our history when movements, to say the least, were not over-rapid. It is barely possible, however, that the cotton tree mentioned above was before that growing and utilized there, and that the "cotton wool" of the price list was some of its product. But whether this was so or not, there can be no doubt of the fact that it was in Virginia and in 1621, or very near that date, that the first experiment in cultivating the cotton plant within the bounds of the colonies was successfully tried.

From such a beginning the production spread, but in a very limited way. In Carroll's "Historical Collections of South Carolina" mention is made of the growth of the cotton plant in that State in 1666. Again, in the

same State, Mr. Peter Purry settled a Swiss colony in 1733, and brought cotton seed with him. In 1734 the seed was planted in Georgia, being sent to the trustees by Philip Miller, of Chelsea, England. About this time, also, the cultivation had been extended more northerly. In 1736 cotton is stated to have been raised on the eastern shores of Maryland, and subsequently in Delaware, and finally even in Pennsylvania and New Jersey. All this was of course in a small way, and yet it is recorded that the home-grown cotton near Pennsylvania was, about the time of the Revolution, sufficient for the domestic wants of the State, which, however, were by no means large, as woolen and linen were then generally used for clothing. In 1775 the Assembly of the Province of Virginia, "in view of the changing relations with Great Britain," resolved that "all persons having proper land "ought to cultivate and raise a quantity of hemp, flax and "*cotton*, not only for the use of his own family, but to "spare to others on moderate terms."

In the meantime, that is from 1700 onward, the cultivation of this staple was further extended southward beyond South Carolina and Georgia. We find, for instance, that in 1742 a French planter in Louisiana, M. Dubreuil, invented a machine for separating the seed from the fibre. The need for such a machine would indicate that the production of cotton had at that time made considerable progress there. In 1772 a similar contrivance was made by one Crebs, of Florida. But the extent to which the Southern States at about the latter date had developed this industry is best described in a letter by Mr. Jefferson, addressed to M. de Warville, under date of August 15, 1786, in which he says "the four southernmost States make "a great deal of cotton. The poor are almost entirely "clothed in it in winter and summer. In winter they wear

“shirts of it, and outer clothing of cotton and wool mixed.
“In summer their shirts are linen, but the outer clothing
“cotton. The dress of the women is almost entirely of
“cotton manufactured by themselves, except the richer
“class, and even many of these wear a great deal of home-
“spun cotton. It is as well manufactured as the calicoes
“of Europe.”

Too much, however, must not be predicated on this letter of Mr. Jefferson. Cultivation was then, without doubt, widely spread over the States named, but was still very limited as to the quantity each produced, the cotton being as yet almost wholly used to supply domestic wants. About that time, however, a change in this respect took place, as is well indicated by a letter of Richard Teake, dated Savannah, December 11, 1788, and written to Tench Coxe, of Philadelphia. In it he says: “I have been this
“year an adventurer, and the first that has attempted, on
“a large scale, in the article of cotton. Several here, as
“well as in Carolina, have followed me and tried the
“experiment. I shall raise about 5,000 pounds in the
“seed from about eight acres of land, and the next year I
“expect to plant from fifty to one hundred acres. The
“lands in the southern part of this State are admirably
“adapted to the raising of this commodity. The climate
“is so mild, so far to the south, scarce any winter is felt,
“and—another grand advantage—whites can be employed.
“The labor is not severe attending it—not more than rais-
“ing Indian corn.” Thus, from this date the progress made in cultivation was more decided. In 1790 it is recorded that William Elliott was very successful with a crop of cotton at Hilton Head, S. C., so much so that it gave a marked impetus to the production in that section; and in 1791 the total yield in South Carolina and Georgia was at the time estimated at 2,000,000 pounds (three-

fourths in South Carolina and one-fourth in Georgia), or, at 440 pounds net to the bale, say 4,545 bales. Such was about the condition in which we find cotton cultivation at the period of the invention of the cotton gin, in 1793. But, before proceeding further, let us note the early beginnings in the export movement, bringing that account down to the same date.

EXPORT MOVEMENT FROM 1739 TO 1793.

The following is a brief statement of events in this department of the trade, so far as we have been able to collect the facts, down to 1793:

- 1733—Samuel Auspourguer, a Swiss living in Georgia, took over to London, at the time of the controversy about the introduction of slaves, a sample of cotton raised by him in Georgia. This we may call, in the absence of a better starting point, the first export.
- 1747—During this year several bags of cotton, valued at £3 11s. 5*d.* per bag, were exported from Charleston. Doubts as to this being of American growth have been expressed, but as cotton had been cultivated in South Carolina for many years, there does not seem to be any reason for such doubts. Besides, English writers mention it as an import of Carolina cotton.
- 1753—"Some cotton" is mentioned among the exports of Carolina in 1753, and of Charleston in 1757; and a London publication in 1762, quoted in "Bishop's History of American Manufactures," says: "What cotton and silk both the Carolinas send us is excellent, and calls aloud for the encouragement of its cultivation in "a place well adapted to raise both."
- 1764—Eight (8) bags of cotton imported in Liverpool from the United States.
- 1770—Three (3) bales shipped to Liverpool from New York; ten (10) bales from Charleston; four (4) bales from Virginia and Maryland; and three (3) barrels full from North Carolina.
- 1784—About fourteen (14) bales shipped to Great Britain, of which eight (8) were seized as improperly entered, on the ground that so much cotton could not have been produced in the United States. This act of our English cousins looks, under the circumstances, a little more like sharp practice than ignorance.
- 1785—Five (5) bags imported at Liverpool.
- 1786—Nine hundred (900) pounds imported into Liverpool.
- 1787—Sixteen thousand three hundred and fifty (16,350) pounds imported into Liverpool.

1788—Fifty-eight thousand five hundred (58,500) pounds imported into Liverpool.

1789—One hundred and twenty-seven thousand five hundred (127,500) pounds imported into Liverpool.

1790—Fourteen thousand (14,000) pounds imported into Liverpool. We can find no reason for this marked decline in the exports, except it may be that the crop was a failure that year. Our first supposition was that the cause was one of price. But on examining the quotations in Took's work on "high and low prices," we do not see any marked decline in the values of other descriptions of cotton, and the American staple is not given in his list until 1793. We would refer the reader to Took's table of quotations which will be found in our chapter on prices.

1791—One hundred and eighty-nine thousand five hundred (189,500) pounds imported into Liverpool, the price averaging here 26 cents.

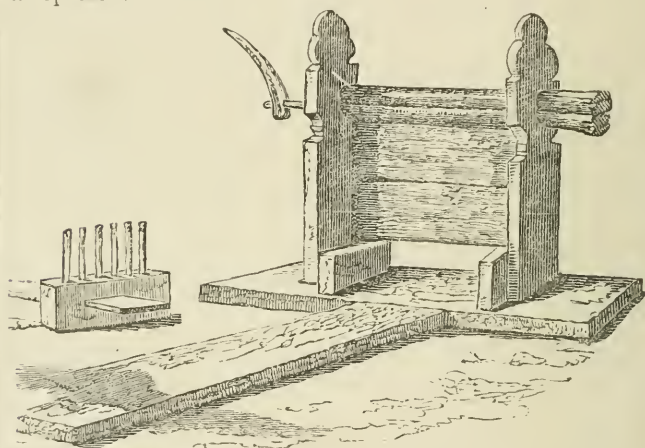
1792—One hundred and thirty-eight thousand three hundred and twenty-eight (138,328) pounds imported into Liverpool.

It should be stated in connection with the foregoing that although the amounts named above are the imports into Great Britain each year from the United States, they were not in all cases wholly American cotton. Not till 1802 did our Custom House returns distinguish home-grown from foreign cotton, and we were for many years importing as well as exporting. For instance, in 1795 we imported 4,107,000 pounds, and exported 6,276,000 pounds. What portion of the 4,107,000 pounds of foreign entered into our exports that year it is impossible to say; but the only reasonable supposition is that a considerable portion, if not all of it, did, since the total crop of South Carolina and Georgia in 1791 was estimated, as stated above, to be only 2,000,000 pounds; and it is scarcely probable that the crop would have increased during the four years so rapidly as to leave such an increased surplus. So also in 1796 a very considerable portion of our exports must have been foreign cotton; but for subsequent years they were almost wholly American.

PRODUCTION FROM 1793 TO 1826.

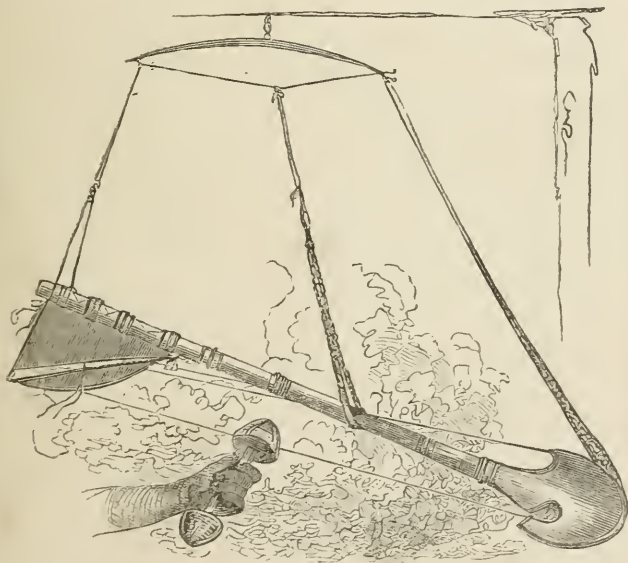
With 1793 a new era in cotton production opened. In

that year Whitney invented the cotton or saw gin. Previously very rude instruments were used for the purpose of separating the seed from the lint. We have already referred to the invention of Dubreuil, of Louisiana, in 1742, and of Crebs, of Florida, in 1772. Each invention was probably a combination of rollers, not unlike the mill long before that in use in India, of which the following is a representation :



This, as will be seen, is a hand-mill, and was worked by the women. The two rollers were of teak wood, fluted longitudinally with five or six grooves, revolving nearly in contact. The upper roller was turned by a handle, and the lower carried along with it by a perpetual screw at the axis. The cotton was put in at one side and drawn through by the revolving rollers; but the seeds, being too large to pass through the opening, were torn off and fell down on the opposite side from the cotton. This rude apparatus, however, did not prepare the staple for market or for use. Another operation was still necessary, which was called "bowing the cotton," to clear it from dirt and knots. This was done by an instrument called a bow, a very simple contrivance of wood, the elasticity of which

was increased by a combination of strings. It was used by being first placed in contact with a heap of cotton, and then the workman struck the strings with a wooden mallet, the result being that the vibrations opened the knots of the cotton, shook out the dust and dirt, and raised it to a downy fleece. This contrivance was early introduced into Georgia, from India, and its use in Georgia gave rise to the term "*bowed Georgia cotton*," a term then and still applied in commerce, although it is now more than half a century since any instrument of that description was used in this country. The following is a representation of the East India bow, which was probably the model from which our own Georgia bow was first made, though subsequently modifications in the way of improvements were added.*



One can easily see that with such rude machines for preparing the staple for market, any large increase in the cotton crop of America was almost out of the question;

* See Bain's "History of Cotton Manufacture," pages 66 and 67.

and yet the manufacturing industry had reached such a stage of development that it required a speedy and decided addition to the supply of the raw material. First—the spinning machines of Hargreaves and Arkwright were only brought to perfection in about 1780, and through defects in the patents were thrown open to the public at the close of 1785. After the latter date, and as a result of the setting aside of the patents, an astonishing extension of manufacture immediately followed. Second—at very nearly the same time the factory system took its rise in England. Up to about 1785 cotton manufacture had been almost entirely carried on in the houses of the workmen. No larger apartments than a cottage were required for the hand or stock cards, the spinning-wheel and the loom. But after the improvements in machinery above referred to were made, more room than a cottage, more strength than an ordinarily-built house, and more power than the human arm were required. Out of these necessities extensive manufacturing establishments grew up, which further assisted in the development of this industry. Third—the first steam engine made for a cotton mill was made in 1785, but it was not till 1790 that Richard Arkwright adopted Watt's invention, and not till 1792 that the first steam engine was set up in Glasgow. The total number of steam engines in use in Manchester up to the year 1800 is stated by Farey to have been 32, of 430 horse-power. From the latter date the adoption of steam as a motive power in cotton factories was more rapid.

Thus at about the time Whitney's cotton gin came into use, spinning machinery had re-created cotton manufacture; the factory system had organized and developed its new life, and Watt's steam engine had forced it into a vigorous growth. As our readers are familiar with the

workings of the saw gin, it is unnecessary to describe it. The fact of its invention in 1793, its speedy adoption, and the subsequent rapid development of cotton cultivation, just in time to meet the growing necessities of the manufacturer, are the points of interest—admirably illustrating the working of that divine law of progress notably conspicuous in the whole history of the human race, under which each want as it arises finds its complement ready at hand.

The effect of the combined circumstances above indicated on the production of this staple in the United States may be seen from the following table of exports of cotton from the United States from 1791 to 1826, both inclusive:

EXPORTS OF COTTON FROM THE UNITED STATES.

Years.	Quantity.	Years.	Quantity.	Years.	Quantity.
	Lbs.		Lbs.		Lbs.
1791....	189,316	1803...	41,105,623	1815....	82,998,747
1792....	138,328	1804....	38,118,041	1816....	81,747,116
1793....	487,600	1805....	40,383,491	1817....	85,649,328
1794....	1,601,700	1806....	37,491,282	1818....	92,471,178
1795....	6,276,300†	1807....	66,212,737	1819....	87,997,045
1796....	6,196,729†	1808....	12,064,366‡	1820....	127,860,152
1797....	3,788,429	1809....	53,210,225	1821....	124,893,405
1798....	9,360,005	1810....	93,874,201	1822....	144,675,095
1799....	9,532,263	1811....	62,186,081	1823....	173,723,270
1800....	17,789,803	1812....	28,952,544§	1824....	142,339,663
1801....	20,911,201	1813....	19,399,911§	1825....	176,439,907
1802....	27,501,075	1814....	17,806,479§	1826....	204,535,415

† The years 1795 and 1796 include a quantity of foreign cotton in the exports.

‡ 1808 was the year of the American embargo on foreign trade.

§ The years 1812, 1813 and 1814 were those of the war.

Leaving out the years 1795 and 1796, when so considerable an amount of foreign cotton was probably included, it will be seen from the foregoing how rapid must have been the actual growth of production in this country. In 1793 we exported only 487,600 pounds; but in 1797 the export had increased to 3,788,429 pounds, in 1798 to 9,360,005 pounds, and in 1803 to 41,105,623 pounds. At the same time, with these decided additions to the foreign

movement, the uses of the staple were being widely extended in our own country, so that the production increased in even a larger proportion. During these years, however, no full figures of the actual growth were kept.

COTTON PRODUCTION FROM 1825 TO 1877.

The first attempt at a crop report approaching completeness was made in October, 1825, when the totals for the previous year, as well as the year closing at that time, were given. In October, 1826, the second report was made, and in the following October (1827) full statistics were prepared, not only of production, but also of the exports and Northern consumption. In the latter year the Northern consumption reached 103,483 bales, and it probably did not vary much from that amount in 1825. The crops for the three years, from 1824 to 1826, may be stated as follows:

	Year ended October 1.		
	1824.	1825	1826
New Orleans.....	126,481	200,453	251,959
Florida.....	4,500	3,000	2,817
Alabama.....	44,924	58,796	74,201
Georgia.....	152,735	138,000	190,592
South Carolina.....	134,518	97,000	111,978
North Carolina.....	46,000	72,000	88,180
Total crop, bales.....	509,158	569,249	720,027
Estimated Northern consumption	100,000	100,000	100,000
Leaving for export.....	409,158	469,249	620,027

As the exports given on the previous page are for the calendar year and these figures are for the crop year, no comparison between them can be made.

Commencing with the following season, a very convenient summary of every item of each statement, down to Sept. 1, 1877, will be found on succeeding pages. Until 1841-42 the crop year was brought down to October 1; after that it was changed so as to close as at present, September 1.

COTTON CROP OF THE UNITED STATES.		1826-27.	1827-28.	1828-29.	1829-30.	1830-31.	1831-32.	1832-33.
Receipts at Wilmington, &c., North Carolina.....	bales	112,811	77,422	40,515	36,862	36,540	28,461	30,258
Receipts at Norfolk, &c., Virginia.....	do	.....	.....	31,500	35,500	33,895	37,500	30,829
Receipts at Charleston, &c., South Carolina.....	do	179,810	109,733	195,365	188,871	185,166	173,872	181,876
Receipts at Savannah, &c., Georgia.....	do	233,920	153,749	246,000	253,117	230,502	276,437	271,025
Receipts at Apalachicola, &c., Florida.....	do	4,163	3,940	4,116	5,787	13,073	22,651	23,641
Receipts at Mobile, Alabama.....	do	89,707	71,563	79,904	102,684	113,186	125,921	129,366
Receipts at New Orleans, Louisiana, &c.....	do	336,870	304,186	260,314	354,024	426,485	322,635	403,443
Total Crop of the United States.....	do	957,284	720,593	857,744	976,845	1,038,847	987,477	1,070,438
Export to Great Britain.....	do	646,139	424,743	498,001	595,713	618,718	638,148	630,145
Export to France.....	do	157,952	148,519	184,821	200,791	127,029	207,209	207,517
Export to other countries.....	do	49,707	26,738	66,178	42,242	27,636	46,371	29,793
Total export.....	do	853,798	600,000	749,000	838,716	772,783	891,728	867,455
Deduct foreign cotton included in export.....	do	.....	.....	.....	522	606	227	286
Total American cotton exported.....	do	853,798	600,000	749,000	838,194	772,177	891,501	867,169
Consumed North.....	do	103,483	120,593	92,182	126,512	168,145	173,800	196,663
Consumed South.....	do	.....	.....	.....	.....	.....	.....	.....
Total United States consumption.....	do	103,483	120,593	92,182	126,512	168,145	173,800	196,663
Burnt or lost in United States.....	do	.....	.....	.....	7,803	.....	.....	.....
Stocks in United States ports, August 31.....	do	.....	.....	16,562	20,895	119,423	41,599	48,205

COTTON CROP OF THE UNITED STATES.		1833-34.	1834-35.	1835-36.	1836-37.	1837-38.	1838-39.	1839-40.
Receipts at Wilmington, &c., North Carolina.....	Bales	33,220	34,399	32,057	18,001	21,433	11,136	9,394
Receipts at Norfolk, &c., Virginia.....	do	44,725	33,170	29,197	28,618	32,000	22,200	23,650
Receipts at Charleston, &c., South Carolina.....	do	227,359	203,166	231,237	196,377	294,334	210,171	312,194
Receipts at Savannah, &c., Georgia.....	do	258,655	222,670	270,121	262,971	304,210	265,112	292,693
Receipts at Apalachicola, &c., Florida.....	do	35,738	52,085	79,762	83,703	106,171	75,177	136,257
Receipts at Mobile, Alabama.....	do	149,978	197,692	236,715	232,243	309,807	251,712	445,725
Receipts at New Orleans, Louisiana, &c.....	do	454,719	511,146	477,972	600,877	731,256	584,994	953,672
Receipts at Galveston, &c., Texas.....	do	.....	.....	3,564	2,645	3,300	2,871	3,911
Receipts overland from Tennessee.....	do	.....	.....	100	137	2,280	.....	3,250
Total crop of the United States.....	do	1,295,394	1,254,328	1,360,725	1,425,575	1,804,797	1,363,403	2,181,749
Export to Great Britain.....	do	756,291	722,718	771,148	850,786	1,165,155	798,418	1,246,791
Export to France.....	do	216,424	252,470	266,188	260,722	321,480	242,243	447,465
Export to other countries.....	do	55,236	48,311	79,267	56,917	88,994	34,028	181,747
Total export from United States.....	do	1,027,951	1,023,500	1,116,603	1,168,425	1,575,629	1,074,689	1,876,003
Deduct foreign cotton exported.....	do	382	486	559	620	281	1,751	2,595
Total American cotton exported.....	do	1,027,569	1,023,013	1,116,044	1,167,805	1,575,348	1,072,938	1,873,408
Consumed North.....	do	196,413	216,888	236,733	222,540	249,363	276,018	295,193
Consumed South.....	do	.....	.....	.....	.....	.....	.....	.....
Total United States consumption.....	do	196,413	216,888	236,733	222,540	249,363	276,018	295,193
Burnt or lost in United States.....	do	.....	2,421	6,230	2,751	15,001	2,511	6,950
Stocks in United States ports, August 31.....	do	29,617	41,623	43,311	75,820	40,305	52,211	58,442

COTTON CROP OF THE UNITED STATES.		1840-41.	1841-42.	1842-43.	1843-44.	1844-45.	1845-46.	1846-47.
Receipts at Wilmington, &c., North Carolina.....	Bales	7,865	9,737	9,039	8,618	12,487	10,637	6,061
Receipts at Norfolk, &c., Virginia.....	do	20,800	19,013	12,139	14,500	25,200	13,282	13,991
Receipts at Charleston, &c., South Carolina.....	do	227,400	260,164	351,658	301,870	426,361	251,405	350,200
Receipts at Savannah, &c., Georgia.....	do	148,947	232,271	299,491	255,597	295,440	194,911	242,789
Receipts at Apalachicola, &c., Florida.....	do	93,552	314,416	161,098	115,562	188,693	141,184	127,852
Receipts at Mobile, Alabama.....	do	320,701	318,315	481,714	467,990	517,196	421,966	323,462
Receipts at New Orleans, Louisiana, &c.....	do	814,680	727,658	1,060,246	832,172	929,126	1,037,114	705,979
Receipts at Galveston, &c., Texas.....	do	4,408	5,101	15,328	18,170	25,159	27,008	8,317
Total receipts at the ports.....	do	1,638,353	1,686,675	2,390,703	2,047,479	2,419,662	2,097,537	1,778,651
Receipts overland from Tennessee.....	do	1,000	2,000	3,500	1,100	.....	3,000	1,828
Taken from plantations by Southern consumers.....	do	.....	.....	.....	60,000	63,000	70,000	80,000
Total crop of the United States.....	do	1,639,353	1,688,675	2,394,203	2,108,579	2,484,662	2,170,537	1,860,479
Export to Great Britain.....	do	858,742	935,631	1,469,711	1,202,498	1,439,306	1,102,369	830,909
Export to France.....	do	348,776	398,129	346,139	282,685	359,337	359,703	211,486
Export to other countries.....	do	105,759	131,489	191,287	144,307	285,093	201,750	168,827
Total export from United States.....	do	1,313,277	1,465,249	2,010,137	1,629,490	2,083,736	1,666,792	1,214,222
Deduct foreign cotton exported.....	do	1,192	5,292	4,742	3,525	4,035	349	353
Total American cotton exported.....	do	1,311,785	1,459,957	2,005,395	1,625,965	2,079,721	1,666,143	1,210,869
Consumed North.....	do	297,288	277,439	325,129	336,057	374,506	407,516	419,301
Consumed South.....	do	.....	.....	.....	70,687	79,500	80,787	90,491
Total United States consumption.....	do	297,288	277,439	325,129	406,744	454,006	488,303	509,795
Burnt or lost in United States.....	do	6,654	1,510	1,000	10,584	16,581	2,795	2,100
Stock in United States ports, August 31.....	do	82,068	31,807	91,486	159,772	91,156	107,122	214,837

COTTON CROP OF THE UNITED STATES.		1817-18.	1848-49.	1849-50.	1850-51.	1851-52.	1852-53.	1853-54.
Receipts of Wilmington, &c., North Carolina.....	Bales.	1,518	10,041	11,861	12,928	16,242	23,496	11,524
Receipts at Norfolk, &c., Virginia.....	do	8,952	17,550	11,500	19,910	20,820	25,783	21,936
Receipts at Charleston, &c., South Carolina.....	do	261,752	458,117	384,265	387,075	476,614	463,203	416,754
Receipts at Savannah, &c., Georgia.....	do	254,825	391,372	313,635	322,376	325,714	349,490	316,005
Receipts at Apalachicola, &c., Florida.....	do	153,776	200,186	181,344	181,204	188,499	179,476	155,114
Receipts at Mobile, Alabama.....	do	436,336	518,706	350,952	451,748	519,449	545,029	538,684
Receipts at New Orleans, Louisiana, &c.....	do	1,190,733	1,093,797	781,886	933,369	1,373,161	1,380,875	1,316,925
Receipts at Galveston, &c., Texas.....	do	39,742	38,827	31,263	45,820	64,052	85,790	110,325
Total receipts at the ports.....		2,317,634	2,728,536	2,096,706	2,354,460	3,014,851	3,253,142	2,917,597
Receipts overland from Tennessee.....	do	1,479	.....	.....	797	175	9,740	12,130
Taken from plantations by Southern consumers.....	do	75,000	80,000	75,000	60,000	75,000	90,000	105,000
Total crop of the United States.....	do	2,424,113	2,808,536	2,171,706	2,415,257	3,090,029	3,352,882	3,035,027
Export to Great Britain.....	do	1,324,265	1,537,901	1,106,771	1,418,265	1,668,749	1,736,860	1,603,750
Export to France.....	do	279,172	368,259	289,627	301,358	421,375	426,728	374,058
Export to other countries.....	do	251,824	321,684	193,757	269,087	353,522	364,812	341,310
Total export from United States.....	do	1,855,261	2,227,844	1,590,155	1,988,710	2,443,646	2,528,400	2,319,118
Deduct foreign cotton exported.....	do	372	1,122	1,341	1,077	543	1,855	1,565
Total American cotton exported.....	do	1,857,889	2,226,722	1,588,814	1,987,633	2,443,103	2,526,545	2,317,583
Consumed North.....	do	525,321	503,201	475,702	393,788	592,074	660,000	599,485
Consumed South.....	do	82,840	91,838	87,967	70,320	85,955	101,000	116,086
Total United States consumption.....	do	608,201	595,039	562,769	464,108	678,029	761,000	715,571
Burnt or lost in United States.....	do	1,392	550	6,946	3,142	6,025	20,861	1,913
Stock in United States ports, August 31.....	do	171,468	151,753	167,930	124,304	91,176	135,643	135,603

COTTON CROP OF THE UNITED STATES.

	1854-55.	1855-56.	1856-57.	1857-58.	1858-59.	1859-60.	1860-61.
Receipts at Wilmington, &c., North Carolina.....	26,139	26,098	27,117	23,999	37,482	41,191	56,295
Receipts at Norfolk, &c., Virginia.....	31,000	20,458	23,773	24,705	33,011	56,987	78,132
Receipts at Charleston, &c., South Carolina.....	499,272	495,976	397,331	406,251	480,653	510,109	336,339
Receipts at Savannah, &c., Georgia.....	378,694	389,445	322,111	282,973	475,788	525,219	477,581
Receipts at Atlantic City, &c., Florida.....	136,597	144,401	136,314	122,351	173,181	192,721	121,172
Receipts at Mobile, Alabama.....	454,595	659,738	503,177	522,361	704,406	843,012	546,791
Receipts at New Orleans, Louisiana, &c.....	1,232,644	1,661,433	1,435,000	1,576,409	1,669,274	2,139,425	1,751,599
Receipts at Galveston, &c., Texas.....	80,737	116,078	89,882	145,286	192,062	252,424	144,747
Total Receipts at the ports.....	2,839,678	3,513,630	2,934,765	3,104,338	3,766,160	4,561,091	3,512,662
Receipts Overland from Tennessee.....	7,661	11,215	4,754	9,624	85,321	108,676	113,424
Taken from plantations by Southern Consumers.....	85,000	117,500	117,000	125,000	143,000	154,000	170,000
Total Crop of the United States.....	2,932,339	3,645,345	3,056,519	3,238,962	3,994,481	4,823,770	3,826,086
Export to Great Britain.....	1,549,716	1,921,386	1,428,870	1,809,966	2,019,232	2,669,432	2,175,225
Export to France.....	409,931	480,637	413,357	384,002	450,696	589,587	578,063
Export to other countries.....	284,562	552,583	410,430	396,187	551,455	515,154	374,280
Total export from United States.....	2,244,209	2,954,606	2,252,657	2,590,155	3,021,403	3,774,173	3,127,568
Deduct foreign cotton exported.....	891	835	1,161	723	884	917	701
Total American cotton exported.....	2,243,318	2,953,771	2,251,496	2,589,432	3,020,519	3,773,256	3,126,867
Consumed North.....	573,843	631,991	683,597	452,185	760,218	786,521	650,357
Consumed South.....	104,741	138,248	135,541	142,666	155,914	178,107	188,993
Total United States consumption.....	678,584	770,239	819,138	594,851	916,139	964,628	839,350
Burnt or lost in United States.....	2,704	500	798	711	11,492	7,415	4,390
Stock in United States ports, August 31.....	143,336	61,171	49,238	102,926	149,257	227,708	83,187

COTTON CROP OF THE UNITED STATES.		1861-65	1865-66.	1866-67.	1867-68.	1868-69.	1869-70.	1870-71.
Receipts at Wilmington, &c., North Carolina.....		64,653	38,623	38,643	35,908	59,612	91,320
Receipts at Norfolk, &c., Virginia.....		39,093	127,867	166,587	140,971	202,898	312,353
Receipts at Charleston, &c., South Carolina.....		112,462	162,217	240,131	199,072	216,582	350,582
Receipts at Savannah, &c., Georgia.....		238,798	218,601	353,939	357,253	488,201	726,406
Receipts at Apalachicola, &c., Florida.....		119,432	57,451	38,593	13,392	22,874	13,918
Receipts at Mobile, Alabama.....		429,102	239,516	366,193	230,621	306,001	401,673
Receipts at New Orleans, Louisiana, &c.....		711,629	702,131	584,124	791,265	1,142,007	1,416,490
Receipts at Galveston, &c., Texas.....		175,065	186,495	114,666	147,817	246,281	321,801
Received at New York, Boston, Baltimore, &c.....		218,753	214,340	194,970	181,189	196,591	331,578
Total receipts at the ports.....		2,158,987	1,977,271	2,240,282	2,100,428	2,911,121	4,032,154
Overland direct to manufacturers.....		40,000	42,000	198,613	258,611	153,825	298,923
Taken for consumption South.....		30,000	40,000	60,000	80,000	90,000	91,210
Total crop of the United States.....		2,228,987	2,059,271	2,498,895	2,439,039	3,154,946	4,352,317
Export to Great Britain.....		1,258,277	1,216,472	1,228,890	989,677	1,471,695	2,367,440
Export to France.....		222,593	198,117	198,395	221,527	316,450	138,703
Export to other countries.....		71,587	138,142	299,730	233,816	357,772	660,599
Total export from United States.....		1,552,457	1,552,761	1,657,015	1,448,020	2,178,917	3,166,742
Deduct foreign cotton exported.....	
Total American cotton exported.....		1,552,457	1,552,761	1,657,015	1,448,020	2,178,917	3,166,742
Consumed North.....		587,292	676,307	825,015	918,806	806,890	1,008,956
Consumed South.....		30,000	40,000	60,000	80,000	90,000	91,210
Total United States consumption.....		617,292	696,307	885,015	998,806	896,890	1,100,196
Burnt or lost in United States.....		7,896	10,740	1,890	.....	4,172	5,535
Sent to Canada by railroad.....		18,000	27,563	5,682
Stock interior Northern ports, beginning of year.....		10,381
Stock interior Northern ports, close of year.....		39,476
Stock in United States outports, August 31.....		288,692	83,155	38,130	12,343	59,747	101,814

COTTON CROP OF THE UNITED STATES.

	1871-72.	1872-73.	1873-74.	1874-75.	1875-76.	1876-77.
Receipts at Wilmington, &c., North Carolina.....	52,528	61,576	57,895	101,715	107,836	138,087
Receipts at Norfolk, &c., Virginia.....	276,098	433,583	505,876	418,114	529,126	575,917
Receipts at Charleston, &c., South Carolina.....	271,211	374,176	438,191	438,897	416,372	468,021
Receipts at Savannah, &c., Georgia.....	450,539	611,039	625,857	603,216	524,825	431,800
Receipts at Apalachicola, &c., Florida.....	19,359	11,068	14,185	10,982	17,351	23,089
Receipts at Mobile, Alabama.....	288,012	332,157	299,578	320,222	374,672	360,918
Receipts at New Orleans, Louisiana, &c.....	957,538	1,210,384	1,221,698	993,775	1,415,959	1,135,035
Receipts at Galveston, Texas.....	197,916	343,450	389,015	368,283	488,610	506,031
Received at New York, Boston, Baltimore, &c.....	219,615	237,313	251,962	211,335	316,278	278,613
Total receipts at the ports.....	2,732,286	3,651,316	3,801,290	3,497,169	4,191,112	4,038,141
Overland direct to manufacturers.....	122,065	141,500	237,572	205,359	333,116	300,282
Taken for consumption South.....	120,000	137,662	128,526	130,483	145,000	117,000
Total crop of the United States.....	2,974,351	3,930,508	4,176,388	3,832,991	4,669,288	4,455,423
Export to Great Britain.....	1,454,512	1,905,566	1,867,936	1,893,708	2,080,711	2,021,877
Export to France.....	181,655	232,903	370,865	359,699	456,872	466,704
Export to other countries.....	318,747	521,517	602,180	431,301	715,111	557,916
Total export from United States.....	1,957,314	2,679,986	2,840,981	2,684,708	3,252,994	3,049,497
Deduct foreign cotton exported.....	.....	.....	2,809	3,867	4,585	6,413
Total American cotton exported.....	1,957,314	2,679,986	2,838,172	2,680,841	3,248,409	3,043,084
Consumed North.....	977,540	1,063,465	1,177,417	1,002,522	1,211,598	1,288,418
Consumed South.....	120,000	137,662	128,526	130,183	145,000	117,000
Total United States consumption.....	1,097,540	1,201,127	1,305,943	1,132,705	1,356,598	1,405,418
Burnt or lost in United States.....	1,005	1,000	2,000	3,938	4,169	3,597
Sent to Canada by railroad.....	3,500	2,900	4,260	5,591	4,482	2,872
Stock interior Northern ports, beginning of year.....	39,176	4,766	13,793	16,613	8,352	9,661
Stock interior Northern ports, close of year.....	47,666	13,793	16,643	8,352	9,661	10,855
Stock in United States on hand, August 31.....	51,521	90,989	108,152	66,049	120,380	119,658

The foregoing pages present a brief recital of the more prominent events and facts which together make up the history of cotton production in this country. It would have been of interest to have further extended this sketch, or at least to have noted the peculiar circumstances and conditions which attended and assisted in the speedy revival of this industry, subsequent to the war. But the crop statements we give since 1865 are really all that is necessary for our present purposes. In future chapters, however, we may have occasion to introduce some other facts covering that period.

CHAPTER III.

INDIA COTTON SUPPLY.

PAST AND FUTURE.

Early history of cotton in India—Herodotus—Christian era—Early exports of cotton manufactures—Extreme beauty and fineness of cloths—Rude machinery used—Cotton manufacture carried on everywhere—The reason for excellence attained—History of Indian exports to England and her acts of prohibition—Present spindles in India—Total present production of cotton—The monsoons and their effect—Map of India—A statement of each cotton district and its capabilities—Aggregate results—Facts limiting production—Other crops pay better—Shipment from each district—Receipts in Europe—Bombay receipts and exports.

Since India, as a source of cotton supply, has ever ranked—and probably always will rank—next to America in importance, a few facts will be useful here, to refresh our minds as to its past position and future capabilities. And yet in a work of this description it is not possible, nor do we conceive it desirable, to enter upon a detailed account of all that is imagined or known with regard to the cotton plant and cotton productions of that country. Both have a history dating back several thousand years. Even at the time of Herodotus (484 to 424 B. C.) the inhabitants appear to have been so long in the use of this staple that their garments, when they wore any, were commonly made of cotton. That historian, speaking of the things for which they were then peculiarly celebrated (Book 11, c. 105), says that “they possess a kind of plant which instead of fruit,

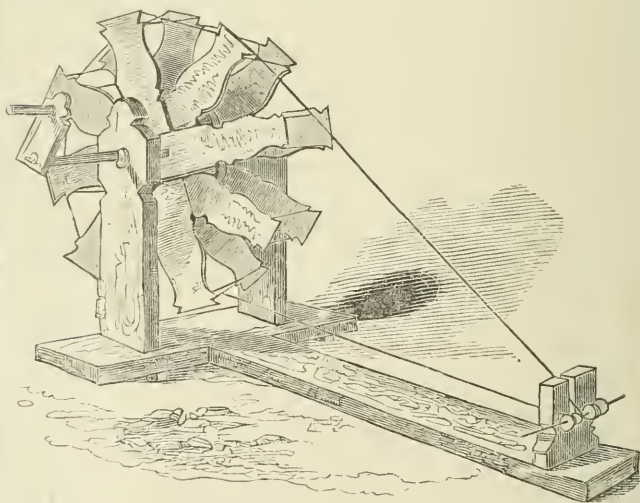
"produces wool of a finer and better quality than that of sheep; of this the Indians make their clothes."

But, passing by the earlier records and coming down to a later period, about the Christian era, we find India engaged in the export of cotton manufactures. That stage in the development of this industry, where supply had out-run domestic wants, had been passed, and a large surplus was being absorbed by other countries. In the "*Periplus Maris Erythrai*," written probably in the early part of the second century, the author, Arrian, an Egyptian Greek, says that the Arab traders at that time made a business of bringing India cottons to Adule, a port of the Red Sea, and that a very considerable trade had been established in them with the ports beyond the Red Sea. He also speaks of the Bengal muslins as being even then of superior excellence. Of a still later date were the journeyings of Marco Polo. He wrote probably late in the thirteenth century, and asserts that he found cotton manufactured everywhere in India, indicating the flourishing condition in which the outside trade must then have been. But not till we reach about 1660 do we have mention of the extreme beauty and wonderful fineness and texture of these goods. Previous writers we have quoted, to be sure, speak of the excellence of the manufactures and also of their beauty; but Tavernier, in his "*Travels*," written at the date last mentioned, goes more into detail at least, and we should think, from his descriptions, saw a more wonderful make of goods than previous historians. He states that some of the muslins which he saw, or "calicuts" as they were then called, were "so fine you could hardly feel them in your hand, and the thread, when spun, was scarcely discernible." One sort he mentions as being of so delicate a texture that "when a man puts it on, his skin appears as plainly through it as if the

" was quite naked; but the merchants are not permitted to
 " transport it, for the Governor is obliged to send it all to
 " the Great Mogul's seraglio and to the principal lords of
 " the court, who use it to make the Sultanesses and noble-
 " men's wives shifts and garments for the hot weather;
 " and the King and the lords take great pleasure beholding
 " them in these shifts and seeing them dance with nothing
 " else upon them." We have not the space to give other
 authorities on these points, and yet, as corroborative
 and undoubted evidence of the extreme skill the Indians
 displayed in their work, we may cite the Rev. William
 Ward, who was an English missionary at Serampore in the
 early part of the present century. He says, in describing
 a kind of muslin then manufactured there, that it was so
 " exceeding fine that when laid on the grass and the dew
 " has fallen upon it, it is no longer discernible." We
 might lengthen out this branch of our inquiry almost
 indefinitely by numberless citations from other authors.
 Suffice it to say, however, that all bear evidence to the one
 fact of India's early perfection in cotton manufactures, her
 goods having become celebrated the world over for their
 remarkable beauty and texture.

This degree of perfection in manufacture is the more
 noteworthy when we remember what rude machines for
 spinning and weaving were then in use. There were of
 course no factories, or what we now call factories, in those
 early days, and, in truth, in India there were none until
 very recently. Every house had its spinning wheel, and
 the women of the household spent a part of their time
 each day at it. Weavers also were to be found in every
 village. Orme, in his "Historical Fragments of the Mogul
 Empire," says, "on the coast of Coromandel and in the
 " province of Bengal * * * it is difficult to find
 " a village in which every man, woman and child is not

“employed in making a piece of cloth. At present, much
“the greatest part of the whole provinces are employed in
“this single manufacture.” And yet, as we stated,
although every one was a producer, and their cloths were
unrivalled, their machines were only of the rudest descrip-
tion. The following cut is given by Bain in his “History
of Cotton Manufactures.” It represents a heavy one-
thread spinning wheel in general use, made of teak wood
of the roughest carpentry, on which the coarse yarn is
spun by the women, the finer yarn being spun on a metallic
spindle, but equally primitive in style.



With such uncouth and cumbersome instruments it is
certainly remarkable that results so wonderful were
obtained. But it is claimed that this superior excellence
was very largely due to the delicacy of touch possessed both
by the men and women. Mill in his history of British India
says that “the weak and delicate frame of the Hindu is
“accompanied with an acuteness of external sense, par-
“ticularly of touch, which is altogether unrivalled; and the
“flexibility of his fingers, is equally remarkable. The hand

“of the Hindu, therefore, constitutes an organ adapted to
“the finest operations of the loom, in a degree which is
“almost or altogether peculiar to himself.”

But we must leave this interesting part of our subject. There is one point in the early and later history of India manufactures, however, which has at present a peculiar and practical interest. It seems that after India had entered upon the export of her muslins, the trade had a vigorous and rapid growth. These muslins first went to the Red Sea only, then beyond the Red Sea, and finally they were so cheap and so beautiful that they found an entry everywhere. Woolen manufacture had obtained an early lodgment in Europe, becoming an important industry in England. When, however, the East India companies brought these inexpensive and finely-wrought cotton fabrics there, they were caught up by the people and used in every way; for “dresses for the women,” “for children’s frocks,” also “for lining for men’s coats and for petticoats, too.” This, of course, crowded out woolens and other English home-made goods. At once the cry was raised that the woolen trade was being destroyed, for the people “wear foreign commodities” instead of “our own English woolen fabrics.” The government was therefore appealed to and asked to “lay a very high impost upon all such commodities.” So in 1700 an act was passed by Parliament which forbade the introduction of “India silks and printed calicoes for domestic use, either as apparel or furniture, under a penalty of two hundred pounds.” This, however, did not appear to stop the trade, and other acts were subsequently passed, more stringent, but for the same purpose. Still, smuggling continued, and the India export continued, and the complaints continued.

In the meantime England began the manufacture of cottons herself, and the industry grew rapidly under the

skill and inventive genius of the nation. Then she, in turn, had a surplus for export, and freer trade principles took root rapidly. Old acts of prohibition were repealed and a more liberal policy was adopted. Now, in turn, English fabrics found their way into India. Improvements in machinery had enabled her to undersell the market. They quickly supplanted the native goods, so that India lost her ascendancy, and with it much of her former skill. But the inhabitants did not quietly submit to being crowded out of their own peculiar field of industry, and more especially from their own territory, so they sought protection against the cheaper productions of the mother country. These efforts were fruitless however, and even a ten per cent duty on the import of Indian manufactured cottons remained on the statute books of England until 1833, we believe.

Still, it seems that India's turn has come at last. As a measure of revenue, a few years since a customs duty on the import of cotton goods was imposed by the Indian government. Of course, under this all English goods imported were required to pay the duty. The net customs revenue of India, according to the last financial statement, issued March 15, 1877, which we now have before us (page 41), was only £2,475,530, and of this amount the duties on cotton goods yielded £850,000. Hence, although Her Majesty's government is constantly saying that the "interests of India" (it might be added of Great Britain, too.) "imperatively require the timely "removal of a tax which is at once wrong in principle, "injurious in its practical effect, and self-destructive in its "operation," yet the financial officer of the Indian government yearly has to "regret" that "for reasons similar to "those which prevailed a year ago it has been decided that "nothing can be done at the present moment towards the

“abolition of these duties.” In the meantime, the tax, which was so easily put on, but is so difficult to get off, is very decidedly fostering the cotton manufacturing industry in India, and the alarm of Manchester can be easily understood. The India financial statement, before referred to, of the Hon. Sir John Strachey (page 73), contains the following statement of the mills now at work in India for spinning and weaving cotton. We also have before us the report, for the year 1868–69, of Harry Rivett-Carnac, Esq., Cotton Commissioner, and from that work (page 156) we take for comparison a list of the spinning and weaving mills in operation that year.

COTTON MILLS IN INDIA.

India Provinces.	In operation in 1877.				In operation in 1869.		
	Mills.	Spindles.	Throstles.	Looms.	Mills.	Spindles.	Looms.
Bombay.....	40	932,530	21,476	8,390	14	338,000	3,732
Bengal.....	4	101,191	3,352	100	3	52,500	220
No. West. Provinces	2	27,350	.....	275	..	.....	.....
Madras.....	3	26,800	.....	44	..	.....	.....
Nagpoor.....	1	30,000	.....	450	..	.....	.....
Hyderabad.....	1	15,172	.....	200	..	.....	.....
Indore.....	1	No	report.	.....	..	.....	.....
Total	52	1,133,046	24,828	9,459	17	390,500	3,952

This is certainly a remarkable exhibit. Probably the consumption of these mills does not fall much short of 300,000 bales of India weights. We notice that Harry Rivett-Carnac gave the consumption of the 17 mills in 1869 at 77,400 bales of 400 pounds weight, which would equal 82,000 of the average India weights. Such a growth in spinning capacity as this, suggests the possibility, after a few years more, of some remarkable changes in the cotton supply of that country and in its power to consume English manufactures. In fact, is it mere fancy to imagine India, with that natural “acuteness of touch” and “flexibility of

finger" so "peculiar to herself," recovering, under the stimulus of modern machinery, at least a share of the trade in which she once, and for so long, led the world? Such a result does not necessarily pre-suppose that this industry in England will suffer a corresponding decay. Hand-made goods must give place to machine-made goods throughout the East. That movement is progressing constantly, and will continue with accelerated speed, permitting progress in India and preventing decline in England.*

We now pass to the point of chief interest in this discussion, and that is the present production of cotton in India, about which much confusion exists, because so little is generally known as to the exact sources of supply. In truth, it seems to be quite difficult to acquire exact information on this subject. The official India documents have of late years contained more details; but outside of them, though very much has been written, little that is of use to the cotton consumer is to be found. We know, for instance, that the India outports receive so much cotton each year; but where it comes from—that is, what districts

* Since the above was written we have received Messrs. Ellison & Co.'s Annual Cotton Circular, and give it in full in subsequent pages. The following table, taken from it, shows the growth in consumption of these Indian factories, and will be of interest in this connection.

Year.	Spindles at work.	COTTON CONSUMED.		
		Pounds.	Bales of 390 pounds.	Bales p week .
1861	338,000	25,350,000	65,000	1,250
1871	593,000	41,175,000	114,000	2,190
1875	886,000	66,150,000	170,000	3,270
1876	1,124,000	84,300,000	216,000	4,150
1877	1,231,000	92,395,000	237,000	4,560

Mr. Ellison, in giving this statement, says that "it is not easy to ascertain the weight of cotton consumed by these spindles, as many of the mill companies have declined to fill up the government forms with the necessary particulars; but the returns received show an average of 75 lbs. per spindle per annum. On the basis of this average the present rate of consumption is about 92,395,000 lbs., or 237,000 bales of 390 lbs., per annum."

produce it, whether those that the next year are visited with drought and famine and no crops, or those that have abundant rain—are points familiar to a few, but about which the cotton public in general have very indefinite ideas. For our own satisfaction, and to supply this need, which we felt existed, we have had constructed the map found in the front of this book. There are numberless maps of India, and we have consulted a great many, but have been able to obtain none which lays down more than a few of the cotton districts, and even those very imperfectly. Undoubtedly, defects will be found in our map, but we think it will be of more practical use to the cotton consumer than any heretofore published. It is the result of information brought together in very many ways. As a basis we have taken the “Map of Routes in India,” published by Edward Stanford, of London, copying the boundaries there indicated of the three great Presidencies and the completed and contemplated railroads, as that map gives them. Our next step was to insert the Central Provinces and the Berars, as described and carefully laid down by H. Rivett-Carnac in his report above referred to. The rest of the information has been collected from so many sources as to make their mention impracticable.

In studying this map and interpreting and weighing the facts we receive each season respecting the production of cotton in India, it is first of all necessary to remember the physical features of the country, and the local influences affecting the climate and the crops. The simple statement that this peninsula is 1,830 miles in length, from the Himalayas to Cape Comorin, extending from the eighth to the thirty-fifth degree of north latitude, expresses much on this point. But when we think of its mountains, not alone on its northern, but also on its eastern and western boundary, and through its very centre; its immense

rivers, a result of its mountains; its volcanic origin and its deep "*regur*" soil (sometimes fifty feet in depth), the product of that igneous conflict; and finally, its monsoons, bringing with them 150 inches of rain in some districts (at one place 600 inches) and from that graded down till it becomes nothing in others;—when we remember that such are the physical conditions of that country, can we wonder that in our information confusion at times exists. The key to the mystery is the rainy seasons, and it is necessary, first of all, then, to consider their nature and effect.

We all know in general terms that monsoon is the name given to the wind blowing half the year in one direction, and the other half in the opposite direction, and that rains follow it. The southwest monsoon breaks at Bombay and south of there on the 5th to the middle of June, and a little later north of that point, and continues, with intermissions, until about the middle or last of September. An average of about seventy-five inches of rain falls at Bombay during those months. After the first heavy burst the weather usually clears up, and days of sunshine follow, which are improved by the cultivators to complete their plantings, the fields being prepared for the crops before the monsoon sets in, but the sowings deferred until after a rainfall.

These are well-known facts; and if they were all the facts, the question of raising crops in India would be simple enough. Prepare your land; wait for the rain; put in your seed; cultivate as occasion permits; then gather your cotton;—such would be the yearly routine. But, as with us, there are disturbing influences which do not make it either so easy or so successful. First, even in the district tributary to Bombay, this southwest monsoon is sometimes very partial. Weeks will intervene during

which the cultivators will be anxiously expecting rain, with scarcely a sign of it to satisfy their longings. Then many of the fields must be resown, and that makes the crop late; and even if the remainder of the year is fairly favorable, the later plantings are not sure on all soils to furnish strong, healthy and fruitful plants; or if the monsoon fails to return in sufficient force, a short crop becomes a certainty. This is the first possible contingency which may disturb calculations with regard to the season's result.

In the next place, the conformation of the land in portions of India, already referred to, is such that this southwestern monsoon does not visit at all some sections, and in others is a very uncertain dependence. All along the Malabar coast run the Western Ghauts, with an elevation at the highest point of about 7,000 feet above the sea. These hills or mountains appear to act as a partial cut-off to the rains coming from the southwest, so that over the country lying east of the Ghauts the rainfall is much less than on the western side, and it decreases very rapidly as you go inland. Cotton, however, does not need an excess of rain, so that Dharwar and Belgaum, for instance, are benefitted by their situation, being shielded from the force of the storms, and yet near enough to the coast to ensure about forty inches of rain during the year, the average for all the best cotton lands.

For the sections south and east of the districts named, very little advantage is obtained through the rains from the southwest. In October, however, the northeastern monsoon begins, and continues along the Coromandel Coast into December and sometimes into January. This is the rainy season for a large portion of the Madras Presidency, upon which the success of its crops depends. But the rainfall from the northeast is never as abundant as from

the southwest monsoon. The Eastern Ghauts, too, though not so high, yet act in some degree as the Western Ghauts to keep back the rain, and frequently over a considerable section it is very light indeed. In this fact we have the explanation of the terrible famines, of which the past year has given us such a fearful illustration. Irrigation has always been practiced to a considerable extent in this Presidency, and, under the influence of late experience, renewed efforts are being made to extend the system, so that a recurrence of these crop failures over so large a section may be prevented. In the northwest is another extensive district, which also comes within what is called the "Dry Zone" of India. But to assist in understanding our map, and to make it more useful, we will give very briefly such data as we have been able to obtain with regard to annual rainfall and usual cotton production of each district, beginning in our review with those sections which contribute the least to the world's supply.*

BENGAL PRESIDENCY.

The cotton raised in this Presidency has usually been called by the general name of Bengal cotton. During our war the production was very considerably increased under the influence of high prices; but since then grain, jute, sugar, rice, &c., have paid better and been raised almost to the exclusion of cotton. There is a very considerable portion of land in this Presidency suitable for this staple; with low prices, however, there is little chance of its cultivation being again extended. The Presidency is divided into Upper and Lower Bengal, or the North West Provinces and the Lower Provinces.

The *North West Provinces* embrace within their limits the celebrated Doab country, lying between the Ganges and the Jumna rivers. The Ganges Canal, which connects the Ganges and the Jumna, passes through the plains of Doab. The canal is used for irrigation and also for the transit of merchandise. In a great part of Upper Bengal it is so dry that cultivation is impossible, very little rain falling, and even in the Doab the rainfall is very uncertain and very irregular, so that the main dependence for water is irrigation.

* The information contained in this summary of the India cotton districts has been drawn from many sources, among them:—A series of articles on India in *London Cotton*; Thornton's *Gazetteer of India*; Reports of the Cotton Commissioners of the principal cotton districts; Public Documents of the British-Indian Government; circulars of cotton merchants at the principal ports.

Of these North West Provinces the Doab country (which includes the Oude) and the Bundelkhund country would appear to be the most promising regions for cotton, and in fact the only ones where more is grown than sufficient for their own consumption. In times past much has been raised there, and now we suppose the small exports from Calcutta are shipped mainly from Calpee, on the Jumna. As is well known, the Banda district in Bundelkhund gives its name to a good description of cotton. Altogether the North West Provinces raised during our war fully 250,000 bales, and in 1864 ran the production up to nearly if not twice that amount. But, of course, very much of this was used within the Bengal Presidency, as they have always been large producers of goods in Bengal. H. Rivett-Carnac estimated the annual cotton consumption in the whole Presidency in 1869 at about 180,000 bales; others, however, put it higher. Now production is decreased, so that they export scarcely any cotton. The reason for this is, as before stated, other crops pay better.

Lower Bengal has much more rain; it comes from the southwest monsoon; the northeast monsoon is the dry one here, as it blows from the land. At Calcutta the rainfall averages about 75 inches, and on the Khassi Hills 600 inches have been measured. Cotton is grown in the uplands, not in the marshy deltas; it cannot be raised unless you get above the level of the Ganges. But Lower Bengal furnishes now no cotton for export, being really a cotton-importing country, and is likely so to remain. The little that is shipped at Calcutta is, as we have said above, brought down the Jumna and the Ganges from distant provinces.

MADRAS PRESIDENCY.

It is within the limits of the southern half of this Presidency that the severe famines have lately prevailed. Shut in by the Eastern and Western Ghats near its coasts, and the Neilgherries uniting with the Western Ghats in Mysore, this section always has very little rain. It possesses good black, cotton soil, but drought makes production impossible. A system of irrigation has long been in existence, and at present there is a movement to extend it. Two fine rivers, besides lesser streams, pass through Madras from west to east—the Godavery and the Kistna. There are only about five or six States in the Presidency (if we except Berars, Central Provinces, and Hyderabad, elsewhere noticed) which produce cotton for export, and the principal of those are Bellary, Tinnevely, Coimbatore, and Guntoor. The others, including Mysore, are not to any considerable extent cotton-exporting, and the most of them are not cotton-raising States.

Tinnevely has an area of 5,700 square miles. The Ghats, on the west, are there only 4,300 feet high. Tinnevely cotton is said to be the best staple raised in Madras Presidency. Tuticorin is the seaport through which shipments are made. The exports at Tuticorin in 1874 reached 92,769 bales, which must have been the surplus production of Tinnevely and neighboring States.

Coimbatore lies a little north of Tinnevely, and has 8,280 square miles, and some rich soil. A railroad to Madras passes through it.

Bellary is between Mysore and Nizam's Hyderabad, and contains 13,056 square miles. It has a large quantity of good soil, and exports probably not to exceed 30,000 bales.

Guntur is 4,960 square miles in extent, and on the Bay of Bengal. It has good cotton land, but other crops pay better, so that cotton production has fallen off.

BENGAL AND BOMBAY FEUDATORIES.

Punjab, Scinde, Cutch and Central India (or, as the latter is sometimes called, Rajpootana) are only a part of the tributary States of these Presidencies, but we group them together, as they are all in the Northern portions of India, and have conditions in many respects somewhat similar. In the first place, Kurrachee is the port through which their products would naturally seek the outside world; to some extent, however, the trade of Cutch and of Rajpootana has of late years, we believe, been diverted towards Bombay. In the second place, the rainfall throughout this entire district is very small, it all being within the "dry zone;" but Central India is far more favored in this respect than the others. Third—Irrigation is resorted to, more or less, in each; and if cotton culture is to be extended, this system of watering the ground must receive further attention. Fourth—They all have within their borders excellent cotton lands, and yet they raise very little more cotton than to supply home consumption. The prominent characteristics of each may be briefly stated as follows.

Punjab.—This is frequently called the Land of the Five Rivers, and has an area of 135,000 square miles. It is almost rainless and has extensive deserts, ten inches of rain being about the outside limit. There are splendid cotton lands near the rivers, and with a proper extension of the system of irrigation they might be brought under cultivation. The Indus also furnishes excellent water carriage to Kurrachee, so that any surplus crops raised could be easily sent to market. Frost, however, in those sections where the land is best would probably prevent cotton from ever being a profitable crop. They sow in February and March generally, but at points as late as June.

Scinde.—This State has an area of 52,120 square miles. Want of rain is the great enemy to production here; from three inches to ten inches is the extent of the fall for the year. Canals are used for watering. The sowing is from February to June, according to the time the rivers rise and fill the canals. About 40,000 bales is the usual production of a good year, the yield being about 40 lbs. to the acre; but much of it is used on native looms. An enlargement of the system for watering the fields is needed to extend cotton cultivation, and even then the frost would be a serious obstacle; besides, with present prices for cotton, other crops would pay better, for the staple is quite inferior.

Cutch.—A splendid strip of very rich *regur* soil lies between the two

ranges of mountains which pass through Cutch from east to west, and there is another strip south of the lower range. But this State, like the last two, has very little rain, only a few inches, and must depend upon canals and wells for water. It produces now about 40 lbs. to the acre, or say a total of 20,000 bales. The staple is said to be good, decidedly better than that of Seinde. The total area of Cutch is 6,744 square miles.

Central India.—This State has an area of 118,947 square miles, and is more favored with rain than either of the others mentioned, though the rainfall (which is from June to September) seldom amounts to 30 inches. In the valley of the Nerbudda the soil is rich and black, well adapted to cotton cultivation. The total production is said to be about 50 lbs. to the acre, the total yield being about 100,000 bales. Under present prices there would seem to be no inducement for an extension of production in any of these States named. With irrigation, the yield per acre is in some sections increased, but at so great an expense that it appears to leave no profit. A collector of one of the North West Provinces made a calculation of raising an acre of cotton there, as follows:—he put down the three ploughings at 3¼ rupees; three waterings at 2 rupees; seed, ¼ rupee; weeding, 1¾ rupee; picking, 1¾ rupee; average rental, 5 rupees; making, altogether, 14 rupees, or 28s. per acre; so that at 3d. per lb., an average of 112 lbs. per acre would have to be raised to pay expenses.

BOMBAY AND THE STATES SHIPPING TO THAT PORT.

Within the limits of these districts, about all the cotton exports of India are now produced. The entire section receives, to a greater or less extent, the southwest monsoon. At Bombay the average rainfall is about 75 inches; in the Central Provinces the average for 15 years was 40 inches; in Dharwar and Belgaum the average is about 50 inches; and in Guzerat about 60 inches; below Bombay, on the coast west of the Ghauts, it is very much more—too much for profitably producing cotton. The Deccan is an elevated plateau of varying height, generally described as extending from the Nerbudda to Cape Comorin. Throughout the Deccan country the celebrated *regur* soil is largely found, and within its limits are the chief cotton-producing sections; it is very rich, retains moisture a long time, and is very productive. We give a short statement of the leading features of the different sections.

The *Central Provinces* have an area of 56,451,234 acres, of which about 20,000,000 acres are cultivated, and about 1,000,000 acres are in cotton. This shows that cotton is a secondary crop, grain taking nearly 8,000,000 acres. The Hingunghat cotton comes from the Central Provinces, and is raised in the valley of the Wurdah. Rivett-Carnie says that the great difficulty in the way of enlarging cotton cultivation in this country is the scanty population (the total population being only about 10,000,000) and want of capital; until these increase he does not

expect further extension of the cotton area. The present production is about 200,000 bales.

The *Berars* adjoin the Central Provinces, and have the same rich soil as the Hingmabaut District. Oomraottee cotton is raised in the Berars. The total area is 10,916,797 acres, of which about 4,750,000 acres are cultivated, and of this the cotton area is about 1,700,000 acres. Thus, although it is only one-fifth the size of the Central Provinces, it has under cotton 700,000 acres more. It raises about 300,000 bales.

Guzerat has an area of 41,536 square miles, including the Kattywar Peninsula. The area in cotton is said to be about 1,500,000 acres. Dholera is in British Guzerat, and gives the name to the cotton from the whole State, and to some also from neighboring districts. The rainfall averages about 40 inches. Production of cotton is about 70 pounds to the acre.

Kanleish contains 9,311 square miles. It is a very good and promising cotton-producing State, the soil through the valley of the Taptee being the rich *regur* so favorable for cotton. About 1,000,000 acres are in cotton, and produce about 70 pounds to the acre. The Berar seed have been introduced during the past fifteen years, and the result is a great improvement in the staple. The rainfall, it is said, averages about 60 inches.

Surat.—This collectorate has about 250,000 acres in cotton, producing about 55,000 bales, at an average of about 75 pounds to the acre. The town of Surat is at the mouth of the Taptee river, and for a long time was the leading India port. From this fact all India cotton was formerly called *Surats*. The rainfall in this collectorate is about 40 inches.

Broch contains 1,319 square miles, of which about 525,000 acres are cultivated, and about 120,000 acres are in cotton, exporting about 35,000 bales. The rainfall averages about 50 inches.

Hyderabad (Nizam's Dominions) has an area of 95,000 square miles, forming part of the Deccan, possessing a large proportion of the rich *regur* cotton soil. The rainfall, however, is insufficient, as the south-west monsoon is in part cut off by the Ghauts, the total averaging less than 30 inches, and consequently irrigation is necessary. Notwithstanding these disadvantages it exports considerable cotton in a favorable season.

Dharwar is one of the very best cotton districts in India, and is the chief one in which American seed has been successful. It has an area of 3,837 square miles, two-thirds of it being under cultivation, and about 600,000 acres under cotton, and more than half of it American seed. The yield per acre, however, is only 80 pounds "American acclimatized," and 60 pounds of native sorts, with a total both kinds of 100,000 bales. It is within the Deccan country, and has the same *regur* soil which there prevails so largely.

Belgaum is north of Dharwar, and has an area of 6,515 square miles,

and a rainfall of about 40 inches. It is also within the Deccan, but produces not over 45 pounds to the acre, as cultivation is very poorly conducted. Its aggregate production is not over 50,000 bales.

Kolapoor, *Kulladgee*, and *Kittoon* each raise some cotton. *Kolapoor* plants about 200,000 acres in cotton, and gets about 60 pounds to the acre; *Kulladgee* plants 150,000 acres, and gets about 70 pounds to the acre; *Kittoon* plants about 80,000 acres and gets about 50 pounds to the acre.

Poona contains 5,298 square miles. It is not important as a cotton district. The rainfall is very deficient at times, being shielded from the monsoon. Grain crops are more productive and pay better than cotton.

Concan, *Ahmednuggur*, *Tanna* and *Ratnagherry*, produce very little or no cotton.

Sattara—This collectorate is south of Poona. It is very wet on the western side, one of the wettest on the Malabar coast; while the eastern side often suffers from drought. Some cotton is raised there. About 60,000 acres is said to be given to cotton, with about 50 lbs. to the acre.

With this very imperfect account of the cotton districts in India, we can arrive at an approximate statement of the limits, under present prices, of the cotton supply from that country. * Formerly it was imagined that production might be indefinitely extended there; but our war dissipated that illusion. Under the influence of very high values and special encouragements from Liverpool and Manchester, it was at one period carried up, as is claimed, to the neighborhood of 2,600,000 bales—that is, if we allow for home consumption at that time the usual estimate from six to seven hundred thousand bales. Many, however, do not believe India ever raised so large a crop, insisting that during those years of largest export the high price was so strong a temptation to sell cotton that the family loom, in great part, lay idle, so that the shipments to Europe were swollen at the expense of home consumption.

Without deciding which of these views is the correct one, the fact remains that the money received for the cotton sold was sufficient to induce the cultivators to push production to its utmost limits, exciting them even to such

a degree that they committed all sorts of absurdities ; “silver ploughshares and tires of solid silver for cart-wheels made their appearance here and there ; fancy prices were paid for bullocks of a favorite color or possessing some peculiarities of tail, and enormous sums were squandered on marriage ceremonies.”* These acts vividly illustrate not only what large profits had been realized, but also furnish a fair measure of the stimulus which must have been applied to production. During the same time, also, the present railway system was developed, and connecting wagon-roads were made or improved, so that extensive districts, hitherto almost beyond the reach of a market, became easily accessible ; while everywhere improvements in cultivation were encouraged and taught.

In a word, about every conceivable force was applied to push India into a position for furnishing a large permanent supply of cotton to the world. But evidently the effort has failed. India, of course, has been vastly benefitted through the civilizing agencies England has so lavishly planted there ; still, not as a cotton-producing State will she repay the debt. She has an ample supply of suitable soil, but not the climate. Of two-thirds of India it may with too much truth be said that hot winds, drought, short crops and famine are certainties ; plentiful rain and prosperous harvests are accidents. Irrigation possibly in time might cure these defects—though as yet it is a disputed question whether it is of any benefit to cotton—could it be attained and used without adding too largely to the cost. But that is not likely, except in special instances, since the same labor can produce what will pay better ; and for the very good reason that other commodities she raises are in quality equal to the best the

* Report for 1869 of Harry Rivett-Carnac, Cotton Commissioner of India, page 132.

world affords. That is to say, labor in Bengal applied to wheat, linseed or indigo produces an article which in the markets of the world commands as high a price as any other wheat, linseed or indigo, but applied to cotton produces a staple only about two-thirds the value of other cotton.) This is the explanation of the failure hitherto to respond to the stimulus applied, and is in truth a barrier which must ever check production except in sections where the soil is better suited for this staple than for other crops, or when an unnatural relation exists between the prices for cotton and for her other productions.

But judging from the past, what may we take as the extreme outside limits of supply in India, with prices satisfactory and the weather conditions at their best in all sections? The above details with regard to the various districts furnish an answer somewhat as follows.

	Exported from—	For export.	For home consumpt'n	Total pro- duction.
BENGAL—				
Northwest Provinces	Calcutta....	} 100,000	225,000	325,000
Lower Provinces	Calcutta....			
British Burmah.	Rangoon ...	25,000	50,000	75,000
MADRAS—				
Guntoor Hyderabad, &c.....	Madras....	175,000	} 75,000	370,000
Godavery River, &c	Coeonada ..	20,000		
Tinnevely, &c.....	Tuticorin ..	100,000		
BOMBAY—				
Punjab.	Kurrachee..	} 25,000	50,000	75,000
Sinde and Cutch ...	Kurrachee..			
Rajpootana	Kurrachee..			
Guzerat, &c.....	Bombay ...	} 1,150,000	400,000	375,000
Broach, Surat, &c...	Bombay ...			160,000
Cent'l Provinces and Berars	Bombay ...			500,000
Kandeish	Bombay ...			200,000
Sholapore, &c.....	Bombay ...			150,000
Dharwar, &c.....	Bombay ...			165,000
Persia to Bombay	Bombay ...	20,000	.....	20,000
Total		1,615,000	800,000	2,415,000

We give in the foregoing the home consumption at

800,000 bales. It was estimated by different authorities, seven or eight years ago, at from 625,000 bales to 750,000 bales. Probably the development of the manufacturing interest at Bombay and elsewhere since that date has added at least 175,000 bales to the home requirements. We make the total, therefore, at 800,000 bales. As an indication of the extent to which home consumption is increasing, we have the receipts and exports at Bombay the last two years, from January 1 to December 31, as follows :

BOMBAY.	Receipts.	Exports.	Difference
From Jan. 1 to Dec. 31—			
1877..... Bales.	1,107,101	888,829	218,272
1876	1,121,993	1,015,132	106,861
Increase.....	.....	.....	111,411

These figures show that the Bombay mills must have taken from that port this year 111,411 bales more than for the same months last year. May it not be possible that this growth in spindles will have in the near future a material effect on the exports of the raw material from India. We see no way to avoid such a conclusion, except on the improbable supposition of an enlarged production of cotton.

The statement of possible exports given above is made on the basis—First, of a favorable year in all parts of India. The past two seasons have proved this to be the exception and not the rule. In fact, the whole history of India shows, as we have before stated, that, outside of a very few districts, the result must ever be extremely uncertain, making almost impossible a union of favorable conditions such as we have supposed. Second, that prices are satisfactory and no special inducement exists to cultivate any other commodity. At present, wheat is at a premium, and cotton production therefore is at a discount. Third, that consumption will not grow faster than production will increase.

What the actual European supply has been for five years may be seen in the following, prepared from circular reports of shipments from the different ports.

EXPORTS OF COTTON TO EUROPE FROM INDIA.

Port and Year.	To Liverpool.	To London	Total Great Britain.	To France	To other Continent l Ports.	Total all Europe.
Bombay—						
1873	731,724	2,150	733,874	58,637	166,300	958,811
1874	831,781	10,867	842,648	179,823	225,940	1,248,411
1875	796,818	13,286	810,104	182,264	273,701	1,266,069
1876	573,304	7,631	580,935	161,217	243,649	985,801
1877	383,233	5,772	389,005	172,836	278,328	840,169
Kurrachee—						
1873	4,890	4,410	9,300	.....	.....	9,300
1874	108	475	583	.....	15	593
1875	6,010	6,269	12,279	4,100	1,098	17,477
1876	1,885	647	2,532	.....	.....	2,532
1877	1,450	6,918	8,368	.....	6,125	14,491
Carwar—						
1873 .....	.....	.....	.....	.....	19,127	19,127
1874	2,547	.....	2,547	.....	16,411	18,958
1875	7,504	.....	7,504	.....	26,388	33,892
1876 .....	.....	.....	.....	.....	6,410	6,410
1877 .....	.....	.....	.....	.....	.....	None.
Madras—						
1873	4,133	112,318	116,451	1,366	.....	117,817
1874	10,133	104,739	114,872	2,746	.....	117,618
1875	1,045	131,067	132,112	37,141	4,440	173,693
1876 .....	.....	97,274	97,274	27,911	810	125,995
1877	100	2,804	2,904	.....	.....	2,904
Cocoonada—						
1873	9,950	7,000	16,950	5,000	.....	21,950
1874	13,100	8,000	21,100	14,126	.....	35,226
1875 .....	.....	10,500	10,500	28,800	.....	39,300
1876 .....	.....	6,070	6,070	23,000	.....	29,070
1877 .....	.....	13,452	13,452	1,712	.....	15,164
Tuticorin—						
1873 .....	.....	65,841	65,841	1,900	983	68,724
1874 .....	.....	85,889	85,889	6,880	.....	92,769
1875 .....	.....	41,127	41,127	.....	6,956	48,083
1876 .....	.....	41,825	41,825	7,908	11,652	61,385
1877 .....	.....	13,007	13,007	5,460	.....	18,467
Calcutta—						
1873	27,449	74,618	102,067	8,607	5,134	115,808
1874 .....	.....	7,814	7,814	300	2,666	10,780
1875	500	35,763	36,263	6,029	9,163	51,455
1876	50	18,414	18,464	.....	.....	18,464
1877	1,283	51,598	52,881	1,577	1,799	56,257
Rangoon—						
1873	12,246	3,587	15,833	2,584	1,271	19,688
1874	7,458	2,975	10,473	.....	.....	10,473
1875	12,706	6,555	19,261	.....	1,312	20,573
1876	4,664	530	5,194	.....	.....	5,194
1877	21,035	.....	21,035	.....	1,000	22,035

RECAPITULATION.

Port and Year.	To Liver-pool.	To London	Total Great Britain.	To France.	To other Continent ¹ Ports.	Total all Europe.
All Ports—						
1873	790,392	269,924	1,060,316	78,094	192,815	1,331,225
1874	865,167	220,759	1,085,926	203,875	245,032	1,534,833
1875	824,583	244,567	1,069,150	258,334	323,058	1,650,542
1876	579,903	172,391	752,294	220,036	262,521	1,234,851
1877	407,101	93,551	500,652	181,585	287,250	969,487

These statements sufficiently show the capabilities of India, what she can do and what she has done in the way of cotton production. Of the actual exports to Europe previous to 1873 we have not the material at hand for preparing a full statement. The following, however, gives the imports of India cotton into Europe and the deliveries of the same to European spinners each year since 1865–66.

IMPORTS AND DELIVERIES OF EAST INDIA COTTON.

Year.	Net Imports into Europe.	DELIVERIES.		Total Deliveries.
		Great Britain.	Continent.	
1876-77....	1,136,000	407,000	862,000	1,269,000
1875-76....	1,220,000	479,000	916,000	1,395,000
1874-75....	1,544,000	668,000	947,000	1,615,000
1873-74....	1,421,000	660,000	874,000	1,534,000
1872-73....	1,270,000	737,000	790,000	1,527,000
1871-72....	2,039,000	658,000	726,000	1,384,000
1870-71....	1,202,000	558,000	753,000	1,311,000
1869-70....	1,419,000	834,000	623,000	1,457,000
1868-69....	1,856,000	913,000	850,000	1,763,000
1867-68....	1,307,000	799,000	723,000	1,522,000
1866-67....	1,524,000	815,000	777,000	1,592,000
1865-66....	1,991,000	878,000	755,000	1,633,000
Total...	17,929,000	8,406,000	9,596,000	18,002,000

The deliveries to spinners of India cotton for previous years will be found in a subsequent chapter on the consumption of cotton.

THE BOMBAY COTTON MOVEMENT.

In considering the India movement, special interest is of course felt in Bombay, as through that port the most of the supply must reach the European spinner. The following statement, therefore, of receipts for five years, will be of much interest, as it gives the amount of each descrip-

tion of cotton contained in the total arrivals. They are the figures prepared by Messrs. Wallace & Co. of Bombay, and, on account of these details, are more useful and instructive than any other compilation we have seen.

RECEIPTS OF COTTON AT BOMBAY, 1873-1877.

In Bales of 3½ Cwts.	1877.	1876.	1875.	1874.	1873.
From—					
Oomraottee distr's.	461,154	408,529	507,518	531,352	} 443,539
Hingunghaut dist's.	30,589	15,326	22,753	37,217	
Dhollera districts	377,673	416,106	457,862	} 610,640	} 458,198
Broach districts	175,052	137,722	167,626		
Dharwar districts.	} 37,297	} 133,473	} 141,039	} 122,065	} 109,637
Compta districts.					
Madras & Bengal.					
Persia	14,533	7,803	4,512	3,285	6,289
Kurrachee	10,803	9,031	12,409	19,938	12,370
Total	1,107,101	1,121,993	1,313,719	1,324,497	1,030,033

Through the kindness of Messrs. Wallace & Co. we are also able to furnish our readers with the following explanation of the sources from which these different descriptions of cotton are received.

OOMRAOTTEE.—The cotton which comes under the head of Oomraottee comprises the production of Kandeish, the Berars, a portion of the Central Provinces, and portions also (the Barsee and Nugger districts) of the Sholapore and Ahmednugger collectorates.

HINGUNGHAUT.—This cotton is received at Bombay from the Central Provinces.

DHOLLERA.—The Peninsula of Kattywar (in Guzerat) supplies the bulk of the Dhollera crop; the eastern half of the Peninsula produces the better style of cotton, which goes to make the higher classes, and the western half the lower grades of the description shipped under the name of Dhollera. The larger proportion of the production of the western half of the Peninsula is shipped under the name of and known in Liverpool as "Mangaroles."

BROACH.—Under the head of Broach is included the

production of the collectorates of Broach and Surat and of the native State of Baroda.

COOMPTA AND DHARWAR.—The bulk of Coompta and saw-ginned Dharwar comes by sea from the ports of Coompta, Carwar and Vingarlal, but a portion also reaches Bombay by rail *via* Sholapore.

The foregoing information with regard to the Bombay districts, with the help of the facts, figures and Map of India given previously, should serve effectually to disentangle the India supply problem, and enable the reader, with more satisfaction than has ever before been possible in America, to follow and understand, year by year, the weather and crop reports from that country published during the cultivating and maturing season. We also give the figures furnished by Messrs. Wallace & Co. of Bombay exports to Europe each year since 1858 :

BOMBAY EXPORTS TO EUROPE.

Year.	Great Britain.	Continent.	Total.	Year.	Great Britain.	Continent.	Total.
1877.	389,005	451,161	840,169	1867.	1,061,651	73,362	1,135,013
1876.	555,542	427,913	983,485	1866.	912,432	35,915	948,377
1875.	786,072	455,454	1,241,526	1865.	1,084,578	35,570	1,120,148
1874.	842,812	391,040	1,236,882	1864.	871,923	57,073	928,996
1873.	736,275	268,598	944,873	1863.	926,513	48,604	975,117
1872.	660,064	247,737	907,801	1862.	932,617	23,453	956,070
1871.	798,893	334,570	1,133,463	1861.	930,039	26,986	957,025
1870.	854,596	164,530	1,019,126	1860.	478,820	17,773	496,593
1869.	945,768	175,269	1,121,037	1859.	596,176	26,143	622,319
1868.	1,015,859	169,539	1,185,398	1858.	338,224	12,178	350,402
Total.....							19,103,820

To the above we now add the receipts and exports at Bombay each month since 1872, and the percentage of total receipts received at the close of each month. In this form the figures will be of use in comparing and estimating the movement during future months. The totals, it will be noticed, differ slightly from the above, having been prepared from the circulars of Finlay, Muir & Co. and Nicol & Co.; the differences, however, are immaterial.

RECEIPTS OF COTTON AT BOMBAY FOR 1872, 1873, 1874, 1875 AND 1876.

Month.	1876.			1875.			1874.			1873.			1872.		
	Month.	Total.	Per ct.	Month.	Total.	Per ct.	Month.	Total.	Per ct.	Month.	Total.	Per ct.	Month.	Total.	Per ct.
Jan.	72,000	72,000	66.44	124,000	124,000	69.55	103,000	103,000	67.83	87,000	87,000	68.47	150,000	150,000	15.58
Feb.	103,000	175,000	15.65	196,000	320,000	24.63	147,000	250,000	19.00	141,000	228,000	22.20	175,000	325,000	33.75
March	186,000	361,000	32.29	281,000	601,000	46.50	249,000	499,000	37.92	187,000	415,000	40.31	150,000	475,000	49.33
April	243,000	604,000	54.03	332,000	836,000	64.36	311,000	493,000	31.78	211,000	629,000	61.25	142,000	617,000	64.07
May	258,000	862,000	74.12	229,000	1,065,000	81.49	287,000	1,400,000	83.59	267,000	829,000	80.72	141,000	758,000	78.71
June	124,000	986,000	83.51	136,000	1,201,000	92.16	80,000	1,180,000	89.67	67,000	896,000	87.24	122,000	880,000	91.38
July	16,000	972,000	86.91	11,000	1,212,000	93.30	11,000	1,194,000	90.73	12,000	908,000	88.41	11,000	891,000	92.52
Aug.	14,000	986,000	88.19	7,000	1,219,000	93.84	4,000	1,205,000	91.57	6,000	914,000	89.00	4,000	895,000	92.91
Sept.	15,000	1,001,000	89.53	6,000	1,225,000	91.30	4,000	1,209,000	91.87	10,000	924,000	89.97	2,000	897,000	93.15
Oct.	30,000	1,031,000	92.22	13,000	1,238,000	95.30	11,000	1,220,000	92.70	9,000	919,000	92.40	8,000	905,000	93.98
Nov.	45,000	1,076,000	96.24	22,000	1,260,000	97.00	18,000	1,238,000	91.07	31,000	980,000	95.42	18,000	923,000	95.85
Dec.	42,000	1,118,000	100.00	39,000	1,299,000	100.00	78,000	1,316,000	100.00	47,000	1,027,000	100.00	40,000	963,000	100.00
Total.	.....	1,118,000	100.00	.....	1,299,000	100.00	.....	1,316,000	100.00	.....	1,027,000	100.00	.....	963,000	100.00

EXPORTS FROM BOMBAY DURING 1872.

Month.	Export to Great Britain.			Export to Continent.			Total Exports.		
	Cape.	Suez.	Total.	Cape.	Suez.	Total.	Cape.	Suez.	Total.
January	40,000	63,000	103,000	6,000	13,000	19,000	46,000	76,000	122,000
February	18,000	58,000	76,000	18,000	30,000	48,000	36,000	88,000	124,000
March	17,000	77,000	94,000	29,000	33,000	62,000	46,000	110,000	156,000
April	45,000	66,000	111,000	18,000	24,000	42,000	43,000	90,000	133,000
May	31,000	61,000	92,000	20,000	20,000	40,000	81,000	132,000	213,000
June	45,000	41,000	86,000	.....	14,000	11,000	45,000	55,000	100,000
July	25,000	25,000	50,000	.....	8,000	8,000	33,000	33,000	66,000
August	18,000	15,000	33,000	.....	5,000	5,000	18,000	20,000	38,000
September	15,000	2,000	17,000	.....	1,000	1,000	3,000	3,000	6,000
October	.....	11,000	11,000	.....	3,000	3,000	.....	14,000	14,000
November	.....	7,000	7,000	.....	8,000	8,000	.....	15,000	15,000
December	.....	11,000	11,000	.....	8,000	8,000	.....	19,000	19,000
Total.	227,000	437,000	664,000	91,000	167,000	258,000	318,000	604,000	922,000

EXPORTS FROM BOMBAY DURING 1873 AND 1874.

Month.	Export to Great Britain.				Export to Continent.				Total Exports.			
	Cape.	Suez.	Month.	Total.	Cape.	Suez.	Month.	Total.	Cape.	Suez.	Month.	Total.
1873.												
January	4,000	29,000	33,000	33,000	.....	20,000	20,000	20,000	4,000	49,000	53,000	53,000
February	5,000	77,000	82,000	115,000	.....	17,000	17,000	37,000	5,000	91,000	99,000	152,000
March	15,000	85,000	100,000	115,000	4,000	32,000	36,000	73,000	19,000	117,000	136,000	288,000
April	37,000	95,000	132,000	317,000	11,000	27,000	38,000	111,000	48,000	122,000	170,000	458,000
May	83,000	87,000	170,000	517,000	10,000	30,000	40,000	121,000	93,000	117,000	210,000	608,000
June	66,000	27,000	93,000	610,000	12,000	10,000	22,000	173,000	78,000	37,000	115,000	832,000
July	26,000	9,000	35,000	615,000	10,000	4,000	14,000	189,000	36,000	13,000	49,000	832,000
August	11,000	11,000	22,000	636,000	.....	2,000	2,000	192,000	10,000	15,000	25,000	815,000
September	10,000	12,000	22,000	678,000	.....	3,000	3,000	192,000	.....	20,000	20,000	890,000
October	.....	11,000	11,000	689,000	.....	9,000	9,000	201,000	.....	20,000	20,000	910,000
November	.....	15,000	15,000	704,000	.....	5,000	5,000	206,000	.....	46,000	49,000	959,000
December	3,000	27,000	30,000	734,000	.....	19,000	19,000	225,000	3,000	663,000	.....	959,000
Total	249,000	485,000	.....	731,000	47,000	178,000	.....	225,000	296,000	.....	.....	959,000
1874.												
January	5,000	36,000	41,000	41,000	.....	22,000	22,000	22,000	5,000	58,000	63,000	63,000
February	28,000	29,000	57,000	98,000	.....	32,000	32,000	54,000	28,000	61,000	89,000	152,000
March	64,000	43,000	107,000	205,000	32,000	47,000	79,000	133,000	96,000	90,000	186,000	338,000
April	100,000	105,000	205,000	410,000	12,000	42,000	81,000	217,000	142,000	117,000	289,000	627,000
May	53,000	115,000	168,000	578,000	37,000	47,000	84,000	301,000	90,000	162,000	252,000	849,000
June	72,000	31,000	103,000	681,000	15,000	40,000	55,000	356,000	87,000	71,000	158,000	1,037,000
July	31,000	13,000	44,000	725,000	.....	10,000	10,000	376,000	31,000	23,000	54,000	1,031,000
August	5,000	33,000	38,000	763,000	.....	4,000	4,000	376,000	3,000	37,000	40,000	1,133,000
September	3,000	12,000	15,000	778,000	.....	6,000	6,000	376,000	.....	18,000	21,000	1,154,000
October	.....	15,000	15,000	793,000	.....	4,000	4,000	380,000	.....	19,000	19,000	1,173,000
November	2,000	13,000	15,000	808,000	.....	12,000	12,000	392,000	2,000	25,000	27,000	1,200,000
December	.....	35,000	35,000	843,000	.....	14,000	14,000	406,000	.....	49,000	49,000	1,249,000
Total	363,000	480,000	.....	843,000	126,000	280,000	.....	406,000	489,000	760,000	.....	1,249,000

EXPORTS FROM BOMBAY DURING 1875 AND 1876.

Month.	Export to Great Britain.				Export to Confin. nt.				Total Exports.			
	Cape.	Suez.	Month.	Total.	Cape.	Suez.	Month.	Total.	Cape.	Suez.	Month.	Total.
1875.												
January	3,000	59,000	62,000	62,000	.....	40,000	40,000	40,000	3,000	99,000	102,000	102,000
February	19,000	70,000	89,000	151,000	.....	32,000	32,000	72,000	19,000	102,000	121,000	223,000
March	21,000	81,000	102,000	256,000	.....	46,000	76,000	118,000	19,000	127,000	181,000	404,000
April	79,000	61,000	140,000	399,000	.....	41,000	124,000	272,000	120,000	117,000	267,000	671,000
May	103,000	88,000	191,000	590,000	.....	53,000	88,000	360,000	156,000	123,000	279,000	950,000
June	71,000	41,000	112,000	708,000	.....	30,000	30,000	390,000	71,000	71,000	118,000	1,098,000
July	12,000	23,000	35,000	715,000	.....	3,000	10,000	400,000	13,000	32,000	47,000	1,145,000
August	.....	13,000	13,000	738,000	.....	7,000	7,000	407,000	.....	20,000	20,000	1,165,000
September	7,000	6,000	13,000	771,000	.....	10,000	10,000	417,000	7,000	16,000	23,000	1,188,000
October	.....	5,000	5,000	776,000	.....	10,000	10,000	427,000	.....	15,000	15,000	1,203,000
November	3,000	7,000	10,000	786,000	.....	16,000	16,000	443,000	3,000	23,000	26,000	1,229,000
December	21,000	.....	21,000	810,000	.....	13,000	13,000	456,000	21,000	13,000	37,000	1,266,000
Total.	318,000	462,000	.....	810,000	127,000	329,000	.....	156,000	473,000	791,000	.....	1,266,000
1876.												
January	.....	29,000	29,000	29,000	.....	22,000	22,000	22,000	.....	51,000	51,000	51,000
February	.....	35,000	35,000	64,000	.....	29,000	29,000	51,000	.....	61,000	61,000	113,000
March	.....	43,000	43,000	126,000	.....	26,000	36,000	87,000	.....	71,000	98,000	213,000
April	17,000	78,000	95,000	230,000	10,000	40,000	73,000	162,000	27,000	118,000	179,000	292,000
May	26,000	71,000	97,000	374,000	29,000	38,000	67,000	229,000	61,000	109,000	211,000	603,000
June	73,000	31,000	104,000	503,000	29,000	29,000	79,000	308,000	102,000	58,000	208,000	811,000
July	98,000	13,000	111,000	516,000	23,000	7,000	39,000	338,000	150,000	29,000	43,000	851,000
August	.....	17,000	17,000	533,000	.....	2,000	2,000	310,000	23,000	19,000	19,000	873,000
September	.....	11,000	11,000	547,000	.....	16,000	24,000	351,000	.....	30,000	38,000	911,000
October	.....	12,000	12,000	559,000	.....	12,000	12,000	376,000	8,000	30,000	38,000	935,000
November	.....	16,000	16,000	575,000	.....	18,000	18,000	391,000	.....	31,000	31,000	969,000
December	.....	6,000	6,000	581,000	.....	11,000	11,000	405,000	.....	17,000	17,000	986,000
Total.	211,000	367,000	.....	581,000	157,000	218,000	.....	105,000	371,000	615,000	.....	986,000

COTTON FROM SEED TO LOOM.

BOMBAY RECEIPTS AND EXPORTS TO GREAT BRITAIN IN 1877.

Month.	Receipts of Cotton at Bombay for 1877.			Export to Great Britain.			
	Month.	Total.	Per Ct.	Cape.	Suez.	Month.	Total.
January....	98,000	98,000	08·85	.....	31,000	31,000	31,000
February...	107,000	205,000	18·52	.....	51,000	51,000	85,000
March.....	226,000	431,000	38·93	.....	57,000	57,000	142,000
April.....	255,000	686,000	61·97	24,000	52,000	76,000	218,000
May.....	201,000	890,000	80·40	58,000	19,000	77,000	295,000
June.....	89,000	979,000	88·44	40,000	16,000	56,000	351,000
July.....	15,000	994,000	89·79	8,000	6,000	14,000	365,000
August....	7,000	1,001,000	90·42	.....	5,000	5,000	370,000
September..	4,000	1,005,000	90·79	.....	2,000	2,000	372,000
October....	15,000	1,020,000	92·14	.....	2,000	2,000	374,000
November..	26,000	1,046,000	94·49	.....	2,000	2,000	376,000
December..	61,000	1,107,000	100·00	.....	13,000	13,000	389,000
Total....	.....	1,107,000	100·00	130,000	259,000	.....	389,000

BOMBAY EXPORTS TO THE CONTINENT, &c., IN 1877.

Month.	Export to Continent.			Total Exports.			
	Cape.	Suez.	Total.	Cape.	Suez.	Month.	Total.
January..	2,000	13,000	15,000	2,000	44,000	46,000	46,000
February...	19,000	35,000	69,000	19,000	89,000	108,000	154,000
March.....	20,000	27,000	116,000	20,000	81,000	104,000	258,000
April.....	17,000	77,000	210,000	41,000	129,000	170,000	428,000
May.....	78,000	67,000	355,000	136,000	86,000	222,000	650,000
June.....	31,000	16,000	405,000	74,000	32,000	106,000	756,000
July.....	1,000	2,000	108,000	9,000	8,000	17,000	773,000
August.....	1,000	6,000	415,000	1,000	11,000	12,000	785,000
September..	.....	3,000	418,000	.....	5,000	5,000	790,000
October.....	.....	7,000	425,000	.....	9,000	9,000	799,000
November..	.....	12,000	437,000	.....	14,000	14,000	813,000
December..	.....	44,000	451,000	.....	27,000	27,000	840,000
Total....	172,000	279,000	451,000	302,000	538,000	.....	840,000

CHAPTER IV.

ACREAGE IN THE UNITED STATES.

1869 TO 1877.

How far can acreage figures be relied upon—Immaterial what ones are used, so long as they conform to the progressive conditions of the industry—How the figures of 1874-75 and 1875-76 were determined—Figures for 1869—Total cotton crops show growth in acreage—Crop of 1870-71 proves growth—Acreage from 1869 to 1877—Yield per acre—Largest and smallest yield on acreage of 1877—Agricultural Bureau figures—Percentages of yield and acreage in each State.

We have given in a previous chapter of this work such details as we could gather with regard to the early plantings of cotton in the United States, and of each year's crop, and of the disposition of the same down to the present time. Much of interest will, we are persuaded, be felt in thus following the stream up to its source, and bringing before us anew the facts which show from whence and by what steps the wonderful development in this country of this single industry has come.

But, although such a historical review is inspiring, the real purpose of this volume, as we have already stated, is a more practical one. The planter, the merchant, the spinner are all far more deeply interested in the events of to-day than in the past, except as that past bears upon the future. The hourly inquiry is, how are prices to rule; and the first in interest, because the chief element in that problem, must

always be the probable extent of the American crop. Light on that point is, as every one will admit, especially important. But there is no royal road for obtaining it. We can, of course, easily jump at a conclusion in accordance with our wishes, as most do; but if we desire to act intelligently, our only way is to begin at the bottom and work up. Hence, if we would reach an enlightened conclusion with regard to the extent of any growing crop, it is necessary for us to know at the outset the *possibilities* of the crop, and that involves a determination, as nearly as can be, of the amount of land which has been put into cotton. The preliminary question then at once arises:—

HOW FAR CAN ACREAGE FIGURES BE RELIED UPON?

And right here let us say that we have no regard or preference for any set of figures, representing the cotton area, except as they appear to be the true ones. If exception is taken to those we use, all we would say is, substitute any others you may see better reasons for adopting. Our argument is in no way affected by the change. There is a maximum and a minimum yield from any given area planted. Deduce those results from your own figures, and then study the subsequent portions of this book on your own basis; only remember that the actual yield of the past seven years and the actual conditions of weather are fixed facts and relative facts, and the like results can and must always be predicated on the same facts, whenever they recur. If you take a smaller acreage than we give, the effect, as to the yield of previous years, will be that the pounds per acre are proportionably larger. We most earnestly hope, however, that the objector will not satisfy himself with objecting simply, but will accept some figures of acreage, and work out on them the very processes we have worked out on these. This will at least serve to place limits to the guesses which fly about

our markets every year. We repeat, therefore, that we do not wish any one to follow our acreage figures unless convinced that they are as nearly correct as it is possible for such statements to be; the rejection of them in no way weakens the force of the subsequent facts we present.

But let us, before proceeding further, consider briefly what grounds there are for accepting as approximately correct the statistical results which have been current during late years as to the extent of land under cotton. It is well known that the first facts on this subject were supposed to date back to the census of 1870. If that supposition is correct, an error has always been made in the use of those figures. For if they were deductions from the census returns, they should have been applied to the summer of 1869—as that is the crop covered by the census—instead of 1870; or, if they are not from the census, but were made up from returns obtained by the Agricultural Department, even then they could not have applied to 1870, as that year's Agricultural report is dated before that crop was gathered or even perfected, and hence before the yield per acre could be known or determined. It would seem, therefore, that the date of those figures should be changed to the crop of 1869–70. With this amendment, may we not feel some confidence in their approach to accuracy. They were prepared at a time when there was no contest about them, and no interest to make the result large or small, and, as is believed, from data procured in gathering the census returns. We should say that such conditions make a presumption in favor of the substantial correctness of the statement.

Nor does the fact (if fact it be) that the acreage is fixed now, through a second census or otherwise, at a considerable increase, impeach the former census figures or negative the presumption in their favor. The two statements

are not incompatible. Growth is plainly marked on every industry in this country. Compare the acreage in corn, oats, wheat, or the spindles in cotton or woolen factories, or the statistics of any other employment or business, from any two succeeding census reports, and rapid progress is everywhere the feature, and in a wonderful degree. Or, if we confine ourselves to cotton, only pass the eye over the following statement of the crops of the United States, and we cannot fail to see that the increase in acreage must have always been decided.

TOTAL CROPS OF THE UNITED STATES.

Years.	Quantity.	Years.	Quantity.	Years.	Quantity.
	<i>Bales.</i>		<i>Bales.</i>		<i>Bales.</i>
1826-27...	957,281	1842-43...	2,394,203	1858-59...	3,994,481
1827-28...	720,593	1843-44...	2,108,579	1859-60...	4,823,770
1828-29...	857,744	1844-45...	2,481,662	1860-61...	3,826,086
1829-30...	976,845	1845-46...	2,170,537	1861-62...	.....
1830-31...	1,038,847	1846-47...	1,860,479	1865-66...	2,228,987
1831-32...	987,477	1847-48...	2,424,113	1866-67...	2,059,271
1832-33...	1,070,438	1848-49...	2,808,596	1867-68...	2,498,895
1833-34...	1,205,394	1849-50...	2,171,706	1868-69...	2,439,039
1834-35...	1,251,328	1850-51...	2,115,257	1869-70...	3,154,946
1835-36...	1,360,725	1851-52...	3,090,029	1870-71...	4,352,317
1836-37...	1,425,575	1852-53...	3,352,882	1871-72...	2,974,351
1837-38...	1,801,797	1853-54...	3,035,027	1872-73...	3,930,508
1838-39...	1,363,403	1854-55...	2,932,339	1873-74...	4,170,388
1839-40...	2,181,749	1855-56...	3,645,345	1874-75...	3,832,991
1840-41...	1,639,353	1856-57...	3,056,519	1875-76...	4,669,288
1841-42...	1,688,675	1857-58...	3,238,962	1876-77...	4,485,423

* Years of Civil War; no record of crop.

The foregoing indicates certain seasons, all through the series, when there was a set-back in production, generally following an extreme crop. This has been owing in some cases to less favorable conditions of growth; and in other cases to a temporary decrease in acreage, succeeding an excessive increase of the previous years, or to both these circumstances. Progress is never uniform; it is always secured by just such pulsations, not unlike the rising of the tide, first encroaching, then receding, but in each beat gaining. To see the net result take a decimal period; and

clearly—looked at in that way—the teaching of this statement of crops secured, is, that there must have been in each period a very decided addition to the land under cotton. Nor are the figures for the last ten years any exception. The objector may urge in opposition the large crop of 1870-71; but the explanation of that is, we had an unusual season—every condition favorable—and the land planted produced all it was capable of producing. We have had no such season since, and still we raised in 1875-76 and in 1876-77 several hundred thousand bales in excess of that year. Does not this very fact then, even if we had no other, furnish positive evidence of there being now considerably more land under cotton than in 1870-71, and of course, therefore, a still larger excess over 1869-70. The argument is this—and we can see no escape from the conclusion—that if we could raise but 4,352,317 bales in 1870-71, with the weather almost perfect everywhere throughout the season, and with a very free use of fertilizers in the Atlantic States, certainly there must have been a very decided increase of acreage between that date and 1875-76 (our figures show less than 16 per cent) to produce in the latter year 4,669,288 bales, with the conditions *very* much less favorable. This advance, of course, is never equal in all portions of the State. In fact, we are familiar with sections where there has been no increase of late years, but a retrograde movement, and yet for the State at large the result is progress.

Thoughts like these led us in the spring of 1876 to re-examine the question of acreage. Up to that date the only information had with regard to the extent of the planting in any season was simply a result of comparisons—by means of percentages of increase and decrease—with previous years, starting always with the accepted figures of 1869-70. Of course each succeeding spring we were one step further

removed from our base; and as in the percentages, during those years, we sought never to over-estimate the planting, the results were constantly and obviously becoming more and more inaccurate. In the spring of 1876, therefore, we started an investigation for determining what was in that and the previous year the actual amount of land put into cotton in each Southern State, and the yield per acre. For several of the States absolute proof was at once found of the inaccuracy of the figures being used:—in three cases the evidence was through the tax returns and the county assessors' statements; in one case the Agricultural Department of the State had revised and perfected the figures through its agents; and in one other instance there was a complete State census. We not only obtained all this information, but also sent several letters of inquiry (with blanks enclosed) into every county of the South; and the replies received to them, in each case contained six special instances, located within the county replying, of acres planted and bales raised on those acres for the two years, together with the estimate of two or more persons as to the average yield per acre. And finally, through returns from the railroads, we sought to establish the actual crop of each section of each State. We are thus particular in re-stating these matters now, because our results have been lately attacked, and it is only proper, therefore, in using them as a basis for our calculations, that we should give our mode of preparing them and reasons for believing in their approximate correctness. We may add as a further proof of their substantial accuracy, and a very satisfactory confirmation of our work, that the June report of the Agricultural Bureau at Washington, contained this sentence, "the estimated area now in cotton *slightly exceeds* 12,000,000 acres." If the Department has really passed through processes similar to those we have recited, and reached a very similar conclusion, our readers will scarcely

be able to hesitate longer, even if any of them have before, in fully accepting our figures.

We start, then, with at least this fact clear we think to all minds—that the acreage statements for 1874-75 and 1875-76, prepared as we have indicated above (although not free from error) are as near the truth as it is possible for such statements to be.

EXTENT OF PLANTING FROM 1869 TO 1877.

No excuse is needed for dwelling at so great length upon the matters already discussed, since we thus secure the means for impeaching or confirming the figures for 1869, and for establishing those for the intervening years. First, however, let us note the points in the problem which now appear to be clear. (1) The acreage results for 1874-75 and 1875-76, which were reached through our investigations, are substantially correct. (2) If the figures of 1869 were prepared from census data or by means of any other thorough inquiry at the time made, there is a presumption in favor of their accuracy. (3) But whether there is any such presumption or not, the simple statement of the actual yield each year given above, shows that there must have been growth in acreage during the last nine years, and this conforms with the general truth, proved by each succeeding census, that every industry in this country is constantly on the increase. (4) Besides this, we have positive evidence of such growth in a comparison of the two crops of 1870-71 and 1875-76; the figures we have adopted show an increased acreage between the two periods of less than 16 per cent. and no statement which can be made of the weather and other conditions surrounding the two crops taken in connection with the actual yield, can be reconciled except by admitting new land in cotton to that extent at least.

None of these positions can, we believe, be questioned; and yet, feeling that upon a point of this importance one cannot have too much evidence, we have pushed our investigations one step further and obtained whatever particulars we could on the subject of every previous year's planting, back to 1869, thus determining as nearly as possible what has been the actual percentage of increase or decrease in each State each season. And first, as a guide in this inquiry, we have taken the information gathered at the time by ourselves for the purpose of making our several annual acreage reports; and second, we have supplemented that with new facts where we could obtain them. In this way, and after a thorough examination of the data thus collected, we have reached the results as to acreage found on the next two pages. We do not, however, even now claim perfection for our work; only this is claimed, that we have given the surroundings of each year's planting season as careful a study as we were able to give them, and the conclusions reached are at least sufficiently accurate for the purposes of this inquiry. The annual totals may be stated in brief, as follows.

YEARS.	Aeres planted.	Crop, pounds net.	Pounds per acre.	Bales in the crop.	Net weight per bale.*
1869-70	8,766,653	1,369,200,000	158	3,154,946	434
1870-71	9,985,000	1,906,300,000	191	4,352,317	438
1871-72	8,911,000	1,305,700,000	147	2,971,351	439
1872-73	9,780,000	1,729,400,000	177	3,930,508	440
1873-74	10,816,000	1,830,800,000	169	4,170,388	439
1874-75	10,982,000	1,682,700,000	154	3,832,991	439
1875-76	11,635,000	2,035,800,000	177	4,669,288	436
1876-77	11,500,600	1,964,600,000	171	4,485,423	438


* These are the net weights of American cotton imports into Liverpool according to the Liverpool Cotton Brokers' annual circular.

The details of these figures will be found on the two following pages.

STATES.	1876-77.			1875-76.			1874-75.			1873-74.		
	Production.		Pounds per acre.	Production.		Pounds per acre.	Production.		Pounds per acre.	Production.		Pounds per acre.
	Total Acreage.	Total Bales.		Total Acreage.	Total Bales.		Total Acreage.	Total Bales.		Total Acreage.	Total Bales.	
North Carolina.....	607,600	225,000	163	620,000	260,000	185	591,000	273,000	203	600,000	265,000	194
South Carolina.....	931,000	315,000	148	950,000	330,000	153	866,000	360,000	143	866,000	350,000	177
Georgia.....	1,581,000	478,000	133	1,700,000	420,000	109	1,650,000	460,000	122	1,700,000	500,000	129
Florida.....	220,500	55,000	109	225,000	60,000	117	220,000	55,000	110	200,000	75,000	165
Alabama.....	1,887,000	560,000	130	1,850,000	600,000	143	1,800,000	520,000	127	1,800,000	575,000	140
Mississippi.....	1,919,000	639,000	146	1,900,000	670,000	155	1,880,000	550,000	129	1,900,000	675,000	156
Louisiana.....	1,212,500	578,000	209	1,250,000	650,000	229	1,150,000	520,000	199	1,100,000	510,000	201
Texas.....	1,313,000	735,000	246	1,300,000	690,000	234	1,175,000	535,000	200	1,000,000	500,000	220
Arkansas.....	1,089,000	590,000	238	1,100,000	650,000	260	950,000	400,000	185	950,000	420,000	194
Tennessee.....	710,000	310,000	184	740,000	339,000	202	700,000	160,000	100	700,000	300,000	188
Total.....	11,500,000	4,485,000	171	11,635,000	4,669,000	177	10,982,000	3,833,000	154	10,816,000	4,170,000	169

∞ We have averaged the bales in above totals at 440 pounds net, that being very near the average net weight of the imports of American cotton at Liverpool during the years 1869 to 1877.

STATES.	1872-73.			1871-72.			1870-71.			1869-70.		
	Total Average.	PRODUCTION.		Total Average.	PRODUCTION.		Total Average.	PRODUCTION.		Total Average.	PRODUCTION.	
		Total Bales.	Pounds per acre.		Total Bales.	Pounds per acre.		Total Bales.	Pounds per acre.		Total Bales.	Pounds per acre.
North Carolina.....	500,000	200,000	176	430,000	175,000	171	543,000	275,000	223	451,714	210,000	204
South Carolina.....	810,000	260,000	136	800,000	255,000	140	900,000	348,000	170	701,700	256,000	160
Georgia.....	1,600,000	505,000	139	1,425,000	328,000	101	1,740,000	600,000	152	1,330,994	350,000	115
Florida.....	160,000	60,000	165	144,000	40,000	122	153,000	60,000	173	140,909	45,000	140
Alabama.....	1,600,000	550,000	151	1,422,000	505,000	155	1,569,000	645,000	180	1,437,272	505,000	154
Mississippi.....	1,650,000	625,000	167	1,490,000	495,000	146	1,660,000	650,000	172	1,464,512	500,000	134
Louisiana.....	1,010,000	520,500	226	960,000	396,000	181	1,100,000	600,000	240	920,700	425,000	203
Texas.....	910,000	495,000	231	880,000	280,000	140	900,000	400,000	195	900,937	322,400	157
Arkansas.....	880,000	455,000	227	800,000	290,000	159	800,000	474,000	260	711,734	321,500	198
Tennessee.....	600,000	260,000	190	510,000	210,000	171	620,000	300,000	213	526,181	220,000	184
Total.....	9,780,000	3,930,500	177	8,911,000	2,974,000	147	9,985,000	4,352,000	191	8,766,653	3,154,900	158

 We have averaged the bales in above totals at 440 pounds net, that being very near the average net weight of the imports of American cotton at Liverpool during the years 1869 to 1877.

The preceding two pages show then sufficiently near, for all practical purposes, what have been the acreage planted in each State each spring since 1869, the actual total yield of each State from such acreage, and the yield per acre in each State. The item usually put in under "Other States" is in all cases omitted, as we could obtain no sufficient information for late years to make a just comparison. It was small and immaterial even in the figures of 1869, and most think it smaller and of less importance now. From these statements we see how the production per acre differs in the various States and in different seasons. That this feature may be presented more clearly, we give below the pounds per acre each year, independently of the other figures, adding, however, the acreage in 1877, which does not appear in the previous tables.

YIELD PER ACRE, 1869 TO 1877.

STATES.	1877-78. Actual Acreage.	Pounds Per Acre.							
		1869-70. 1869	1870-71. 1870	1871-72. 1871	1872-73. 1872	1873-74. 1873	1874-75. 1874	1875-76. 1875	1876-77. 1876
No. Carolina	577,220	163	185	203	194	176	171	223	204
So. Carolina	893,760	148	153	183	177	136	140	170	160
Georgia	1,612,620	133	109	122	129	139	101	152	115
Florida	220,500	109	117	110	165	165	122	173	140
Alabama	1,981,350	130	143	127	140	151	155	180	154
Mississippi	1,995,760	116	155	129	156	167	146	172	134
Louisiana	1,285,250	209	229	199	204	226	181	210	203
Texas	1,444,300	246	234	200	220	231	140	195	157
Arkansas	1,089,000	238	260	185	194	227	159	260	198
Tennessee	725,200	184	202	100	188	190	171	213	184
Total	11,824,960	171	177	154	169	177	147	191	158

Nothing could more plainly illustrate than the foregoing how diverse our climate is; and further—which is a fact of special importance in observing and interpreting weekly weather reports—that a good or bad season in one State by no means ensures, or is concurrent with, a good or bad season in any other. This latter point should always

be kept carefully in view, for very much of the error made in crop estimates has arisen from giving too extensive an application to comparatively local disasters.

But suppose with the present acreage (that is with the acreage of 1877), we should have in any year as successful a season in each State as the best in that State during the record we give, or as unsuccessful as the worst, what kind of crop, in each contingency named, would the year furnish us. This question is interesting and useful, because it covers a possible, though not a probable, contingency; that is to say, such a statement would give us the crop possibilities upon the present acreage in case of an extremely good year, and also the extent of disaster possible in case of an extremely bad year; or to express it briefly, it would show upon a fixed acreage what must be the actual extreme limits of the yield. Perhaps, however, it would be better, instead of taking in the whole eight years, to confine the inquiry to periods of four years, as that would give us two statements for comparison, and one of them only would include the unusual figures of 1870-71. Thus, for instance, the most per acre North Carolina has produced was in 1874-75 when the result was 203 pounds; South Carolina the same year returned 183 pounds, which was her greatest yield during the same four years; to indicate, therefore, the possibilities and capabilities of the country on the present acreage, we have in this manner grouped together this best yield in each State for the last four years, and also the best yield in each State for the previous four years, and have worked out the following results on that basis, which, as already stated, may be said to represent about the largest crop the land now planted is capable of yielding, providing every condition was favorable from the beginning to the end of the season.

POSSIBLE CROP WITH PRESENT ACREAGE ON THE BASIS OF

STATES.	Best yield from 1873 to 1877.			Best yield from 1869 to '73.		
	1877-78. Actual acreage.	Best product ⁿ per acre, 1873 to 1877.	Possible crop, if all conditions are favor- able.	1877-78. Actual acreage.	Best product ⁿ per acre, 1869 to 1872.	Possible crop, if all conditions are favor- able.
		<i>Lbs.</i>	<i>Bales.</i>		<i>Lbs.</i>	<i>Bales.</i>
No. Carolina.	577,220	203	266,308	577,220	223	292,546
So. Carolina.	893,760	183	371,723	893,760	170	345,316
Georgia.....	1,612,620	133	487,450	1,612,620	152	557,087
Florida....	220,500	165	82,688	220,500	173	86,696
Alabama....	1,981,350	143	643,939	1,981,350	180	810,552
Mississippi..	1,995,760	156	707,588	1,995,760	172	780,161
Louisiana....	1,285,250	229	668,914	1,285,250	240	701,045
Texas.....	1,444,300	246	807,195	1,444,300	231	758,258
Arkansas....	1,089,000	260	643,500	1,089,000	260	643,500
Tennessee..	725,200	292	332,933	725,200	213	351,063
Total.....	11,824,960	180	5,012,538	11,824,960	198	5,326,224

The other contingency mentioned may be illustrated by the following statement, which may be called the worst crop that, under any circumstances of weather considered possible from past experience, the land now planted will produce.

POSSIBLE CROP WITH PRESENT ACREAGE ON THE BASIS OF

STATES.	Poorest yield from '73 to '77.			Poorest yield from '69 to '73.		
	1877-78. Actual Acreage.	Poorst pro ^d uct ⁿ per acre, 1873 to 1877.	Possible crop, if all conditions are unfavor- able.	1877-78. Actual Acreage.	Poorst pro ^d uct ⁿ per acre, 1869 to 1872.	Possible crop, if all conditions are unfavor- able.
		<i>Lbs.</i>	<i>Bales.</i>		<i>Lbs.</i>	<i>Bales.</i>
No. Carolina.	577,220	163	213,834	577,220	171	224,329
So. Carolina.	893,760	148	300,628	893,760	136	276,253
Georgia....	1,612,620	109	399,490	1,612,620	101	370,170
Florida....	220,500	109	54,624	220,500	122	61,139
Alabama....	1,981,350	127	571,890	1,981,350	151	679,964
Mississippi..	1,995,760	129	585,121	1,995,760	134	607,800
Louisiana..	1,285,250	199	581,283	1,285,250	181	528,705
Texas.....	1,444,300	200	656,500	1,444,300	140	459,550
Arkansas...	1,089,000	185	457,875	1,089,000	159	393,523
Tennessee...	725,200	100	161,818	725,200	171	281,839
Total....	11,824,960	148	3,986,063	11,824,960	144	3,883,272

Since the foregoing was in print the Agricultural Department has issued its annual volume for the year 1876, of which we have just received a copy. In it we find the full details of its revised acreage figures, now for the first time made public. Its report published in June, only gave the percentages of increase and decrease on last year's totals, with this sentence (which we have quoted above), that "the estimated area now in cotton slightly exceeds 12,000,000 acres." In the present volume we have all the figures, which are as follows.

AGRICULTURAL BUREAU'S ACREAGE FIGURES FOR 1876 AND 1877.

STATES.	Acres, 1876.	Acres per bale.	Acreage, Per Cent.		Acres. 1877.
			Inc.	Dec.	
North Carolina	609,000	2.9	.....	4	584,640
South Carolina	945,500	3.05	.....	3	917,135
Georgia	1,515,000	3	1	.....	1,530,150
Florida	165,000	3.3	1	.....	166,650
Alabama	1,732,250	3.25	2	.....	1,766,895
Mississippi	1,976,000	2.6	4	.....	2,055,040
Louisiana	1,260,000	2.25	6	.....	1,335,600
Texas	1,183,500	2.15	15	.....	1,706,025
Arkansas	1,133,000	2.2	5	.....	1,189,650
Tennessee	741,000	2.85	2	.....	755,820
Indian Territory and other districts	117,000	2.6	.....	.....	117,000
Total	11,677,250	2.63	4	.....	12,124,605

These results, made up by the Bureau independently and by a process in many respects quite different from that by which we obtained ours, and yet so close an approximation to them, show conclusively that our statements must be very nearly correct. It is satisfactory to have the questions which have been raised on this subject thus finally and completely put to rest. We close our analysis of our acreage figures by one more table, which is, we think, a very interesting exhibit, showing the percentage of total acreage and total crop raised in each State for eight years.

We have not compiled these figures with any purpose of expressing or intimating through them an opinion as to what the present crop is to be. Our processes and information are intended only as suggestions of thought to the reader, rather than as substitutes for thought—to incite investigation, not to limit it. Thus far but one point in the problem has been presented, and the simple conclusion from it is, that if an intelligent opinion is desired as to the probable results of any year, the actual acreage for that year applied to the acreage and results of former years, as has been done here, would seem to be the first step in the inquiry;—an important step, however, as it sets absolute limits to the action of subsequent influences, favorable and unfavorable. But that is all it does. Within those extremes the final result is still in unrest; and to an extent this continues all the season through, yet not, as many appear to think, with the same range of possibilities. The limits within which development or damage is possible narrow constantly as each stage of growth passes. And it is our object in future chapters to use the experience of the past so as to detect its teachings on this very point;—that is, to learn from that experience, so far as may be, to what extent we may accept any fact or condition of growth as influencing or determining the season's yield.

CHAPTER V.

PLANTING—CULTIVATION—STAND.

JANUARY TO JUNE.

Importance of Signal Service Bureau data—Cotton lands, how divided—Production of each—Mode of cultivation—Trees girdled and ground prepared—How seed planted and fertilized—Old lands being reclaimed—Early growth of seed—Chopping out—Securing a stand—A good stand a good yield, &c.—Cotton plant tender in early life and tough afterwards—Its early enemies and diseases—Crab grass—Wet May and June—Rainfall, thermometer, Chronicle weather reports and Agricultural Bureau reports from 1870 to 1877—Deductions and conclusions.

Cotton cultivation covers four stages of progress:—first, the planting period; second, the early development, including the stand secured; third, the summer growth; and fourth, the maturing and picking season. In each period weather is the prime factor. To collect, however, the facts forming a weather record of the Southern States for a series of years, is a work of much difficulty. This is so because the data preserved have generally been so partial and local in character that, although they may indicate, with some degree of accuracy, the situation in special districts, yet, as a guide for crop comparisons, they are almost valueless. Since the organization of the Signal Service Bureau this defect has in great measure been remedied. Through it we have the controlling conditions officially determined; and by supplementing their observations with the CHRONICLE's weekly weather reports given

during the past seven years, the surroundings in each district are pretty faithfully indicated. Yet, even such a record requires an acquaintance with the nature and habits of the cotton plant and its modes of cultivation, before its teachings can be correctly read. Let us, therefore, first briefly consider these preliminary points.

Cotton lands in the South may be grouped under two great divisions—the uplands and the bottom lands. The former are sub-divided into light sandy soils, and red or clay soils, and the latter embrace river bottoms, basins, the banks of small streams, the prairies and canebrakes, and the valleys of the Mississippi River and its branches. A still further division of the light sandy lands is sometimes made, it being stated that if the native growth on such soils is pine timber, they will generally produce only one bale to three acres, but if the native growth is oak and other hard woods, commonly known as oak woods, the production will be about one bale to two acres. Red lands or clay soils are usually in the hilly and rolling portions of the country, the native growth being hard wood, and the soil quite fertile, producing from one-half to two-thirds of a bale to the acre. The foregoing estimates of production are on the basis of good cultivation, and cover the third to the sixth year after being brought into use. Bottom lands will produce from one-half a bale to one bale (and sometimes even two bales) per acre, according to the age and fertility of the lands.

Since the war, changes have been made in the mode of managing upland plantations. Formerly every planter brought new land under cultivation every year, and left the used-up portion of his old land to go to waste. At present, fertilizers on the old land keep it productive, and new clearings, therefore, are much less frequent. Whenever such clearings are made, the first step is to girdle

with the ax, two or three feet from the ground, all the trees over six inches in diameter; and the next is to cut down the small trees and brush, pile them in heaps and burn them. The Northern farmer thinks the sooner he is rid of the trees and stumps the better for his crops; but the Southern planter claims, that the decaying wood keeps his land fruitful, so the girdled trees are left to die and decay standing in the fields. There they remain for many years, dropping their branches from time to time with each succeeding storm of wind, until finally the old trunk falls, leaving the stump to waste itself away even more slowly.

As soon as the girdling and brush-burning is completed, the earth is broken up with a scooter plough, which is a long piece of steel, about four inches wide. This process is repeated several times, until the ground between the standing trees is pretty thoroughly pulverized. With such preparations, hardly half a crop can be expected the first year; the next year, perhaps three-quarters of a crop or more will be raised, and the third year a full crop. After that, for three or four years, the land will produce a full crop each season, but subsequently the uplands require fertilizing to make them pay for cultivation. The bottom lands will produce fine crops for many years by planting them in corn every three years.

It will be seen, from this description, that the early cultivation of such a field must be largely with the hoe. After the third year, however, the greater portion of the work can be done with the plough. A thorough farmer, if the weather gives him time, will always use his turn plough in January to break up the ground. In March—or earlier or later, according to the section referred to—a shovel plough, which is like the scooter, except in being six inches wide, must be run through the field to lay off the rows

for the cotton, the distance between the rows varying according to the quality of the soil; in rather thin uplands they are made three feet apart, on better soils they are four to four-and-a-half feet, while in the valley of the Mississippi the distance between them is five to five-and-a-half feet. So, the richer the soil the farther apart the rows are made.

Next, the fertilizers are put into these furrows. Fertilizers are used only in small quantities except in the Atlantic States, and are never put in with the seed, but in the bottom of this first furrow, as otherwise they would destroy the germinating qualities. They are supposed, in a general way, to add to the out-turn of the crop fifty per cent. Nor does the effect all pass off with the first season, but in about the proportion of seventy per cent for the first year, twenty per cent the second year and ten per cent the third year. Until the close of the war such a thing as putting manure of any kind on cotton fields was scarcely thought of. The plan previous to that time was to cultivate the land as long as it would pay; then let it lie fallow, and purchase and clear up new fields in the manner we have described above. Consequently, to-day thousands of acres are to be seen in the South thus thrown away, with the fences rotting down, the soil being considered too poor to cultivate. Fertilizers, however, have brought in a new era, and at present one by one the old fields are being redeemed from the briers, brush and young trees; for, when ploughed deeply and supplied with either home-made or commercial manures, though hitherto considered of no use for cultivation, they are made to produce now a half a bale or more to the acre.

After the fertilizers have been put in as stated, a turn plough turns in the earth on each side of the furrow, leaving a bed or bank about two feet broad, raised two to

three inches, the ground between these beds being broken with the common shovel plough. This leaves the land ready for the seed. Planting opens, in the earlier sections of Texas, in February, but later and later as you come east and north, not beginning in North Carolina until after the tenth of April and closing after the first of May; so that the season may be said to be about two months and a half in length. Of course, in case of overflow or frost or a very backward spring, planting is continued later, sometimes even into June. When the farmer is ready to sow his cotton, he opens in the centre, with his scooter plough, the bed or bank we have described, and scatters the seed in the bottom of the furrow sufficiently thick to ensure about fifteen or twenty plants to the foot. Patent planters, which open the furrow, plant the seed and cover them by one movement, are sometimes used, but not commonly, on account of the trees, stumps and general roughness in many of the fields.

A cotton seed is something like a bean in its early growth. Within it are two leaves and a tap root, and after lying in the ground about a week the tap root strikes down into the earth while the two leaves open above, growing in a few days from two to three inches high, according to the strength of the land. During the next ten days two more leaves appear, and in the following two weeks from four to six additional ones. Then begins the process of chopping out. This work is done first by using a turn plough, with the bar side next to the cotton, and running it within a few inches and on each side of the young plants, so as to throw the earth and grass away from them and leave them standing in a ridge of earth only about six inches wide and two to three inches high. Immediately following the plough are the hoe hands, by whom these ridges are chopped through, cutting out the grass and

leaving only three or four plants in a bunch, the bunches being from twelve to twenty-four inches apart, according to the poverty or richness of the land. After a few days the same plough is again used, but with the shovel side next to the cotton, and the earth which was taken away is thrown back to the plant, and then the ploughing is continued between the rows until the land is all turned over and the grass is either cut up or covered up and killed. This is the first and most important working of the crop, for if it is done successfully there will be very little more trouble with grass in any ordinary season.

For about two weeks the plants are now left to grow, then the ground is again ploughed, and the hoe hands follow, cutting out all the grass they can find and all the plants but one in a hill. When this is completed, the plants are standing in the row twelve inches apart in the poor lands and twenty-four inches in the rich lands. The intention is to have the land entirely covered and shaded in July and August; and as the poor soils will produce a plant about three feet high, with lateral growth of limbs about eighteen inches on each side, and the rich lands will produce plants from five to six feet high, with limbs thirty inches long, the desired result is attained in each case. A stand is secured when this working of the crop is finished, and is said to be perfect when there is one stalk to every three square feet on the poor lands and one stalk to every ten square feet on the richest lands.

Of course, it will never happen that a condition so faultless as we have described can be everywhere attained. But when only one plant is missing in a place, even though the total should reach to one-tenth of the hills in the field, the loss is not as serious as many would imagine, since if the remainder are strong and healthy, they will, with the additional light and air, develop into a larger growth, fill-

ing up, to a considerable extent, the vacant places, and therefore fruiting more abundantly. A much greater injury is sustained when two, three or more plants close together die out. One-tenth missing in that way would be an absolute loss, as there would be no compensating advantages.

We have been thus particular in giving these many details, because only through them can it be understood in what way and how easily the plant can be injured while young. In its early life it is very tender and delicate, but when well started it becomes tough and hardy, and a stand secured is a point of the utmost importance passed. In fact, we might almost say, as the stand is, so will the yield be; that is, a poor stand ensures a short crop, and a good stand almost ensures a full crop. But this thought will need development later on, in connection with our weather record for the different seasons. Before we pass to that, let us notice the principal causes of irregularity and of sickliness in the plant at this stage of growth.

These two defects are generally concurrent; that is, a very irregular stand is also usually a weak and sickly one. Yet it is quite possible to be otherwise, for irregularity may arise from several causes. First, the seed may be imperfect, either from not maturing properly, or from being heated and partly rotted by lying too long in a very large pile when damp, or from injury received in some other way. This cause for a defective stand would be merely local in its operation, and not have any appreciable effect on the size of the crop. But, again, sometimes in the spring there are very heavy rains; these, more especially on the clayey and richer soils, cause the earth to melt, as it is called, and run together, making a solid mass, so that the seeds in germinating cannot break through the surface, and therefore die for long spaces together.

Then, too, the stand is often greatly injured by careless chopping out ; and sometimes on light sandy soils the moles in dry weather loosen the earth so that the sun burns the roots ; or when the spring is backward and cold, the plant is attacked by the cutworm, a little later by the disease known as the sore shin, and by lice.

All these troubles are as nothing, however, compared with the injury and harm done by wet weather through May and June. The greatest enemies of the young plant in the South, and also in India, are the tough native grasses. Crab-grass is the name generally given to this kind of growth in our Southern States. It runs along the ground, putting down its strong, fibrous roots at every joint, so that one bunch soon covers and literally fills up several feet of ground in diameter. Of course, if this grass were left to develop itself, the more tender cotton plant would soon die out. We have already noticed the usual steps taken to clean the fields of this enemy. In dry weather there is no difficulty in doing this. But if the time for chopping out comes when it is raining, and the weather continues wet, this grass grows very rapidly, and it is almost impossible to kill it. A weed can be cut down and killed ; this grass, however, in rainy weather, does not seem to even have its growth checked by being cut up and moved ; it grows right on, and soon is as tall as the cotton above ground, and with roots deeper down in the earth. Under such conditions, the plant must necessarily become sickly ; many die, others spindle up without branches, and consequently without fruit, while very many more are cut up by the cultivator's hoe.

A wet May and June, therefore, are sure to be followed by a short crop. The only difficulty is to determine accurately the fact. Our cotton section is so large in extent, and so varied in climate, that exact information from all

parts of it is very hard to obtain, and a bad stand in one district is no indication of the same condition in another. But if we can be sure of our fact, we can, within well-defined limits, make some pretty safe deductions.

For the purpose of illustrating this truth, we have brought together a detailed history of the weather and early surroundings of each crop since 1871. These records are made up from the data of the Signal Service Bureau, wherever they have a station, and where they have no station, from our CHRONICLE weather reports.

1871.

For the first six months of 1871 the monthly record of rainfall and weather is as follows :

Rainfall at—	Jan.	Feb.	March.	April.	May.	June.
Savannah	0.80	4.68	6.05	4.28	5.22	8.20
Atlanta	2.03	6.20	6.01	5.20	7.17	5.97
Montgomery	4.15	5.57	5.84	6.63	5.77	4.31
Mobile	6.50	3.03	9.79	2.92	6.18	5.18
New Orleans	13.63	1.39	6.11	2.75	5.72	9.89
Galveston .....	.....	.....	.....	.....	.....	11.74

CHRONICLE WEATHER REPORTS SUMMARY.

January.—Weather generally pleasant, and favorable for farm work.

February.—Weather more rainy in Atlantic States and interior of Gulf States, but less rain on the Gulf Coast.

March.—Weather too wet for active farm work, except the third week of the month. Thermometer averaged 60 to 65 in all the Atlantic States, about 60 at Memphis, and up as high as 69 at Galveston, until the last week, when it went down to 52 at Galveston, 56 in the Atlantic States and 49 at Memphis.

April.—First week of April weather greatly improved; very little rain fell, and the thermometer went back to an average of about 66 throughout the greater portion of the cotton belt. After that it was somewhat rainy again, except in a portion of the Southwest; but the last week rain was confined mainly to the coast half of the States. But little rain at Galveston; more needed. Thermometer averaged in the cotton belt about 68 to 70. The month was, on the whole, favorable for an early start.

May.—Weather generally cold and rainy for the season. Rain in the Atlantic and Gulf States on about ten days of the month, and cloudy more days. May 11 it was so cold at Macon Georgia, that our correspondent telegraphed they had to have fires. The same was true at other points. Our Charleston correspondent wrote, under date of May 22, that "there has hardly been a night when fires have not been found comfortable, and in no case has thick covering for beds been discarded." Thermometer was reported at 52 at Memphis in our telegram of May 5, and averaged 59 for week ending May 12. Our Columbus, Georgia, correspondent wrote, May 15: "Continued excessive

"rains and cold, frosty nights have created a necessity for replanting, some having been replanted a third time;" and on May 12, our Memphis correspondent stated "that the cold, wet weather is making the young plant die out."

June.—A very stormy month over much of the South, with excessive rainfall at many points. Grass complained of greatly in parts of South Carolina, almost all of Georgia, and about half of Alabama, Mississippi and Louisiana, the plant looking weak and sickly. Our Macon correspondent states that the "crop is completely overrun with grass," and that is a good sample of all the information from the districts named. Galveston had some very hard rains, but the interior of Texas still complains of drought. Memphis, Nashville and the most of Arkansas send much more favorable reports the last three weeks.

FROM THE AGRICULTURAL BUREAU REPORTS.

The June report (for the month of May) says—"The condition of the growing crop is below average in nearly every State. The spring has been unusually wet and cold, retarding growth, causing the plants to turn yellow and die, and obstructing cultivation. To a large extent replanting has refilled the vacant spaces of imperfect stands. The weather has recently been more favorable, and it is not impossible that an average condition may be attained by the commencement of the picking season. * * * * The percentage below an average condition is respectively as follows in the several States—North Carolina, 10 per cent; South Carolina, 8; Georgia, 18; Alabama, 17; Mississippi, 16; Louisiana, 10; Texas, 7; Arkansas, 17; Tennessee, 10."

The July report (for the month of June) says—"The July returns do not materially change the cotton crop prospect reported in June. Severe rain storms have combined to obstruct cultivation and check growth in the States upon the Gulf coast. The States of Louisiana, Mississippi, Alabama and Florida average lower in condition than at the date of the last report: the Georgia and Texas averages remain unchanged, and an improvement is indicated in the Carolinas, Tennessee and Arkansas."

The foregoing statements establish certain important facts :—

First—That three weeks of April, and the whole of May and June (except the last three weeks of the latter month in the Memphis and Nashville districts), were cold and rainy in every Southern State but the upper half of Texas.

Second—In Texas a drought began in April, and, with the exception of the coast belt, continued with but little interruption through May and June, in the latter month becoming very severe.

Third—As a result of these facts the plant everywhere (except in the upper half of Texas) was first stunted, checked and largely killed by the cold, and after that by the very grassy condition of the fields; consequently the stands

proved in June to be weak, sickly and very imperfect. In the Memphis and Nashville districts an improvement was recorded during the last three weeks of June.

It will be remembered in this connection that the crop in 1871-72, on a decreased acreage of 10 per cent, was over 31 per cent less than the previous crop, being only 2,974,000 bales, against 4,352,000 in 1870-71.

1872.

The average thermometer, rainfall and weather conditions for the first six months of 1872 were as follows :

1872.	Jan.	Feb.	March.	April.	May.	June.
Wilmington... Rainfall...	3.62	5.20	6.42	0.97	4.89	2.87
" Av. therm.	43.5	45.9	48.8	63.2	73.2	78.3
Charleston... Rainfall...	3.78	5.13	9.78	2.46	6.30	1.87
" Av. therm.	45.0	48.5	51.0	65.6	74.9	79.7
Augusta... Rainfall...	5.20	5.87	10.88	2.95	5.36	4.77
" Av. therm.	41.0	46.0	50.0	66.0	74.0	79.0
Atlanta... Rainfall...	2.94	5.28	7.66	3.00	3.75	1.82
" Av. therm.	...	...	...	...	...	...
Savannah... Rainfall...	2.09	4.65	10.18	2.75	5.22	9.52
" Av. therm.	46.0	50.0	53.5	67.0	76.0	80.0
Montgomery... Rainfall...	5.83	6.75	8.50	4.17	4.29	2.68
" Av. therm.	...	...	...	...	...	...
Mobile... Rainfall...	3.69	8.00	12.76	1.35	3.78	6.33
" Av. therm.	45.1	51.7	51.4	69.2	75.7	80.6
New Orleans... Rainfall...	5.10	4.77	9.18	5.01	3.14	5.34
" Av. therm.	48.7	56.2	59.2	70.4	75.8	80.5
Vicksburg... Rainfall...	3.24	5.34	7.82	7.79	13.23	3.82
" Av. therm.	42.7	52.6	56.0	69.2	75.2	81.6
Shreveport... Rainfall...	5.25	5.89	4.11	7.18	9.10	2.70
" Av. therm.	40.7	50.6	54.4	66.5	73.5	80.4
Memphis... Rainfall...	2.17	4.24	5.19	6.99	4.16	4.44
" Av. therm.	35.0	43.0	47.0	61.0	71.0	76.0
Nashville... Rainfall...	2.32	2.11	3.09	5.91	3.09	5.17
" Av. therm.	35.0	43.0	44.2	62.1	71.8	77.4
Galveston... Rainfall...	4.61	2.27	2.77	5.96	2.21	3.39
" Av. therm.	50.0	55.0	61.4	71.7	78.1	83.0

CHRONICLE WEATHER REPORTS SUMMARY.

January.—Early in month mild, with rain; last week cold, with snow and sleet almost everywhere, from Galveston to Memphis and from Mobile to Charleston.

February.—A cold month. Early in the month snow and sleet almost everywhere; thermometer, for instance, averaged 38 the week ending February 3 at Galveston and 37 at Mobile, &c., and 26 at Memphis. Subsequent weeks cold, but moderating gradually, thermometer averaging at Galveston the next week 47, and 56, 59, 62 the three following weeks.

March.—Planting in Texas at end of month nearly completed; elsewhere backward, with weather cold and rainy, except the early part of the month. Four inches of snow at Memphis the third week and flurries of snow the last week of March.

April.—The second week there was a severe storm in Alabama, which extended into a joining States but was less severe there; and apparently another storm from the northwest, which extended into Tennessee. Rivers overflowed in Montgomery district and very high in Memphis

district, but soon receded. Balance of month weather very much improved everywhere, so that planting made good progress. In the Atlantic States fairly favorable all the month.

May.—Texas reports crop developing promisingly. Very heavy showers in the upper half of Louisiana, extending through the Vicksburg and Shreveport districts. Elsewhere, the first three weeks too dry; but last week splendid showers almost everywhere, having a magic effect on crop, and the month closed with the start good and the fields clean.

June.—Until the last week weather favorable, with occasional showers, and stand reported good. Towards last of month complaints of too much rain at very many points, and caterpillars at several points, but no injury done as yet was the general report, the fields being clean and well cultivated.

FROM THE AGRICULTURAL BUREAU REPORTS.

The June report (for the month of May) says: * * * * "Planting was generally delayed by a protracted season of drought, and fields that were planted late occasioned some trouble in obtaining perfect stands; but the recent rains and renewed efforts in planting have finally secured stands of average completeness." * * * * "The condition of the plant throughout the cotton section is very nearly a full average. Separating the Atlantic from the more western States, the former stand a little below an average; the latter are fully up to a standard of a fair condition. The drought which prevailed in April and the first half of May delayed the growth, and the cold nights in the more northern belt had a further retarding effect; but the abundant rains and genial temperature which followed, have wonderfully invigorated and advanced the crop."

The July report (for the month of June) says: "The past month has been generally favorable to cotton. Limited areas have been affected by drought, but rains were quite general during the latter part of June. On the Atlantic coast, showers have been so frequent and heavy since June 20 as to delay cultivation and promote the growth of weeds and grass. Before that date a season of comparative drought of seven or eight weeks had been suffered in a portion of this district, while other counties represent the weather as having been uniformly unfavorable."

These statements show :—

First—That the weather during April, May and June was on the whole very favorable for the development of the cotton plant, far more favorable than during the same months of the previous year.

Second—That the stands in June were reported very good from almost all parts of the South.

The crop grown during this year of 1872-73 was (on about 10 per cent more acreage) 3,930,500 bales, against 2,974,000 bales the previous year.

1873.

For the first six months of 1873 the rainfall, average thermometer and weather summary were as follows.

1873.	Jan.	Feb.	March	April.	May.	June.
Wilmington... Rainfall...	4.13	5.55	1.68	1.75	8.63	3.60
" Av. therm.	50.2	51.6	62.9	71.2	78.0	81.4
Charleston... Rainfall...	4.13	2.27	3.05	1.33	4.90	6.29
" Av. therm.	48.1	53.4	53.6	64.5	74.9	78.1
Augusta..... Rainfall...	5.03	4.16	3.65	2.00	8.63	3.42
" Av. therm.	44.8	49.9	52.3	61.2	72.4	78.6
Atlanta..... Rainfall...	3.36	12.01	2.58	1.96	6.05	6.86
" Av. therm.	.....	.....	.....	.....	.....	.....
Savannah.... Rainfall...	3.50	0.90	4.37	4.37	5.12	4.61
" Av. therm.	49.0	55.0	55.9	67.0	74.0	78.8
Montgomery.. Rainfall...	4.97	9.97	4.51	5.57	10.25	11.08
" Av. therm.	53.3	52.1	61.2	67.1	79.2	81.8
Mobile..... Rainfall...	4.16	3.15	3.86	0.88	11.47	9.87
" Av. therm.	46.3	56.1	57.0	65.7	73.9	79.4
New Orleans.. Rainfall...	5.06	1.93	5.10	1.71	18.68	6.68
" Av. therm.	49.5	60.5	60.1	66.9	73.7	80.1
Vicksburg.... Rainfall...	4.87	4.46	1.87	1.76	8.79	4.16
" Av. therm.	43.0	51.0	58.5	66.2	73.0	80.0
Shreveport... Rainfall...	3.13	7.47	2.67	1.94	4.58	7.94
" Av. therm.	42.2	52.9	58.9	64.8	72.9	79.6
Memphis..... Rainfall...	5.85	8.98	3.14	4.87	4.82	6.66
" Av. therm.	35.0	11.0	50.0	60.0	69.0	73.0
Nashville.... Rainfall...	2.96	7.14	4.11	3.59	4.11	4.20
" Av. therm.	35.4	43.6	47.4	59.4	70.0	77.9
Galveston.... Rainfall...	3.43	0.50	2.80	2.27	5.33	8.61
" Av. therm.	49.8	59.3	61.2	68.0	75.0	82.0
Indianola.... Rainfall...	1.81	1.13	2.34	0.32	6.96	3.71
" Av. therm.	51.5	60.3	65.3	67.6	75.5	82.3

CHRONICLE WEATHER REPORTS SUMMARY.

January.—A cold month. On the 29th thermometer at Indianola, Texas, went down to 15. On the 19th it touched 19 at Mobile and 11 at Montgomery, etc.

February.—Continued cold west of the Alleghanies. At Memphis three days snow in the first week, and excessively cold and snow at Nashville and below. Subsequently temperature moderated. The first week thermometer averaged at Memphis 23; second week, 41; third week, 42, and fourth week, 51. In the third week there was an unusual rainfall, and the rivers in Alabama overflowed, and also the Mississippi at a few points.

March.—Weather generally favorable for crop preparations, the rivers falling and temperature gradually moderating until the last week, when there was a cold turn again, with snow at Memphis and Nashville, and frost at Selma, &c.

April.—A good month for getting in the crop, though too cold and too dry for an early start. In the second and third weeks slight frost was reported as far down as Mobile, and some small amount of re-planting made necessary in several districts.

May.—The first two weeks favorable, the fine showers doing good, except in the second week an unusually severe storm in the Gulf, especially at New Orleans. More rain than necessary the balance of the month, but not to any considerable extent actually injurious until the last week, and then mostly in the lower half of the Gulf States and the lower half or two-thirds of Georgia. In those sections the grass had at that time become very troublesome; elsewhere the stand secured was from fairly good to excellent, though generally backward and late in portions of the Gulf States on account of the lower temperature in those sections during the month.

June.—Too much rain this month in the lower half of the Gulf States and Georgia, and in the coast counties of South Carolina and through a comparatively narrow tract from Galveston over Shreveport to Memphis. Grass troublesome in all those districts; but as the rain was

(over much of the territory named) not continuous but in the shape of showers, better progress than anticipated was made in fighting the grass. The last week in the Gulf and Atlantic States weather improved materially.

Chronicle acreage report (see Chronicle, June 11, 1873), gives the weather up to June 1st in different States as follows.

Texas—Early weather cold, plant very backward in southern half of State, but less so in upper half. Since from about the 5th of May the weather has been all that could be desired. *Louisiana*—Early weather very similar to the weather in Texas. Since first week of May there has been a decided improvement, and in the northern half of the State up to the last of May everything was progressing favorably; southern half of State more rainy, so that in some sections quite choked up with grass. *Mississippi and Alabama*—Early weather better than in last two States, but since then too much rain in the lower half of the State. In the northern portions there has been much less rain, and consequently the condition at present is good. *Georgia*—Early weather cold and plant backward, but by last of May condition of crop good, nearly all being chopped out, the plant small but strong and healthy. *South and North Carolina*—Much the same report as given for Georgia. *Tennessee and Arkansas*—Taking whole of these States together, we should pronounce the present condition of the cotton plant good.

FROM THE AGRICULTURAL BUREAU REPORTS.

The June report says: "Twelve months ago an increase over the previous year in the cotton area was reported in every State; an increase over that of last year is now reported in every State." * * * "The acreage cultivated will fall considerably below that planted. A cold, backward spring, causing much seed to rot in the ground, a very wet May preventing work and increasing the subsequent demand for it, and the impossibility of obtaining sufficient labor to subdue over the whole breadth sown the excessive weeds and grass consequent upon the extraordinarily wet season, conspire to make this result inevitable." * * * "But it will be seen from the extracts below that very generally the weather in the last days of May was favorable, and there was a hopeful prospect that the condition would rapidly improve."

The July report says: * * * "But throughout the cotton States, for a period varying from twenty-five to thirty-four days, according to locality, and ending between the 20th and 30th of June, the weather was wet beyond precedent." * * * "In consequence of this excess of rain and lack of labor, weeds and grass have been overshadowing the cotton plant in every State, and in almost every county reported." We add the Bureau's figures of condition for June and July since 1871.

States.	1877.		1876.		1875.		1874.		1873.		1872.		1871.	
	June.	July.	June.	July.	June.	July.	June.	July.	June.	July.	June.	July.	June.	July.
North Carolina.	62	83	101	104	92	95	89	102	85	91	96	91	90	99
South Carolina.	91	87	98	90	97	99	81	88	88	82	92	97	92	100
Georgia.	89	90	103	103	91	97	80	91	91	91	96	101	82	82
Florida.	92	95	82	98	91	101	90	96	102	99	95	102	103	88
Alabama.	90	91	91	100	101	102	82	92	93	85	105	106	83	81
Mississippi.	94	93	92	91	100	103	78	87	92	83	100	109	81	80
Louisiana.	98	102	89	92	95	105	70	73	94	80	101	103	90	75
Texas.	91	94	90	90	96	93	98	102	86	78	100	105	93	93
Arkansas.	91	94	95	97	90	104	75	91	92	96	98	95	83	90
Tennessee.	94	93	93	103	99	100	90	97	90	96	101	101	90	98

We may gather from the above :

First.—That the start was everywhere late. April was a cold and dry month. The warm rains of the early half of May were therefore needed. Subsequently during May, and also during June, there was too much rain in the coast half of the Gulf and Atlantic States, and in large sections the plant was choked with grass. Upper half of all these States and the whole of Tennessee and Arkansas was in good condition.

Second.—The text of the Agricultural Bureau Reports, makes the condition everywhere very bad, but its figures, even for whole States, show very great differences, and are, except for Tennessee, North and South Carolina and Texas, much more favorable than for 1871; its statement also that June "was throughout the Cotton States wet beyond precedent" would seem from the official reports of rainfall to be inaccurate. There was a great excess of rain at Mobile, Montgomery and New Orleans in May, and also at the two former places in June; but elsewhere it would appear that the average for the two months, though large, was by no means so extreme.

Third.—That the stand in June was good in the upper half of all the States, and in the most of Arkansas and Tennessee, and generally poor and grassy elsewhere.

The crop grown during this year, 1873-74, was (on about 11 per cent more acreage) 4,170,000 bales, against 3,930,500 bales last year.

1874.

The temperature, rainfall, number of days of rain and weather summary for the first six months of 1874 were as follows :

1874.		Jan.	Feb.	March	April.	May.	June.
Norfolk...	Rainfall.....	2.09	4.79	4.26	5.97	3.97	3.19
"	No. days rain.	11	11	10	11	10	12
"	Ther....	High	73.0	77.0	80.0	91.0	102.0
		Low.	15.0	29.0	32.0	43.0	55.0
		Aver	45.2	43.1	48.9	52.2	64.1

1874.	Jan.	Feb.	March.	April.	May.	June.
Wilmington. Rainfall.....	5.14	6.54	3.72	2.88	5.07	2.81
" No. days rain.	7	16	12	13	9	12
" (High	73.0	74.0	80.5	82.0	91.5	97.5
" (Low	31.0	31.5	37.0	34.0	38.0	63.0
" (Aver	50.1	48.1	57.1	62.8	70.1	80.1
Charleston. Rainfall.....	3.15	10.45	3.15	2.95	5.50	2.29
" No. days rain.	5	14	10	7	9	9
" (High	64.0	76.0	81.0	82.0	93.0	96.0
" (Low	27.0	37.0	40.0	47.0	41.0	60.0
" (Aver	42.1	51.5	49.0	67.7	71.4	81.0
Augusta. Rainfall.....	3.44	7.22	7.78	6.23	3.88	3.29
" No. days rain.	12	11	17	13	7	8
" (High	...	...	...	...	95.0	99.5
" (Low	...	...	...	...	52.0	68.0
" (Aver	50.2	50.5	59.0	63.2	72.5	81.4
Atlanta. Rainfall.....	3.14	6.83	7.38	10.42	3.00	7.71
" No. days rain.	1	5	10	12	2	13
" (High	69.0	72.0	76.0	77.0	97.0	95.0
" (Low	18.0	28.0	34.0	40.0	50.0	70.0
" (Aver	50.0	50.0	57.0	65.0	78.0	80.0
Savannah. Rainfall.....	2.07	9.71	2.85	2.69	4.85	4.85
" No. days rain.	12	13	8	11	11	14
" (High	73.0	78.0	80.0	84.0	90.0	90.0
" (Low	29.0	30.0	37.0	46.0	52.0	60.0
" (Aver	52.4	50.3	42.4	66.0	72.2	87.7
Columbus. Rainfall.....	...	...	...	...	...	6.55
" No. days rain.	9	10	11	13	8	27
" (High	...	...	...	...	...	...
" (Low	...	...	...	...	...	...
" (Aver	50.0	55.0	61.0	67.0	72.0	82.0
Macon. Rainfall.....	1.77	6.80	7.83	9.26	1.45	3.48
" No. days rain.	...	...	...	...	...	...
" (High	72.0	76.0	78.0	83.0	92.0	90.0
" (Low	28.0	30.0	36.0	40.0	47.0	70.0
" (Aver	57.0	50.0	57.0	70.0	80.0	80.0
Montgomery. Rainfall.....	3.69	6.57	10.66	9.45	2.03	4.31
" No. days rain.	6	11	13	15	7	22
" (High	77.0	77.0	83.5	82.0	95.5	95.5
" (Low	27.0	30.0	40.0	42.0	50.0	70.5
" (Aver	51.3	54.5	61.0	64.4	73.3	82.7
Mobile. Rainfall.....	2.18	2.72	10.57	10.92	1.23	5.69
" No. days rain.	8	9	15	15	5	12
" (High	71.0	75.0	80.0	88.0	97.0	93.0
" (Low	30.0	35.0	43.0	47.0	50.0	70.0
" (Aver	43.3	56.7	63.3	67.4	76.6	80.1
N. Orleans. Rainfall.....	1.68	3.68	7.57	13.62	0.22	9.62
" No. days rain.	10	12	12	12	3	17
" (High	...	77.0	81.0	75.0	89.0	91.0
" (Low	...	49.0	50.0	47.0	58.0	72.0
" (Aver	56.0	59.1	63.2	65.6	75.7	81.3
Vicksburg. Rainfall.....	5.27	3.47	9.86	22.24	0.16	3.43
" No. days rain.	13	10	15	16	2	9
" (High	...	...	...	81.0	95.0	94.0
" (Low	...	...	...	41.0	52.0	67.0
" (Aver	52.2	54.0	62.5	57.7	75.4	81.9
Shreveport. Rainfall.....	3.51	7.58	9.27	10.61	1.19	1.35
" No. days rain.	12	11	14	10	5	3
" (High	72.0	76.0	82.0	82.0	95.0	96.0
" (Low	20.0	30.0	44.0	47.0	53.0	63.0
" (Aver	50.4	51.6	60.5	61.0	75.2	82.7
Memphis. Rainfall.....	2.88	4.10	6.61	10.16	0.63	2.22
" No. days rain.	6	7	7	8	3	5
" (High	...	...	...	...	...	94.5
" (Low	...	...	...	...	...	60.0
" (Aver	47.0	45.0	53.0	55.0	72.0	81.0
Nashville. Rainfall.....	5.22	9.23	5.26	11.84	1.19	2.87
" No. days rain.	19	14	19	15	7	7
" (High	...	...	...	...	...	90.0
" (Low	...	...	...	...	...	60.0
" (Aver	42.3	44.5	51.7	54.7	72.0	83.5
Galveston. Rainfall.....	1.37	3.11	3.09	3.38	0.80	1.68
" No. days rain.	9	10	10	8	3	6
" (High	...	...	...	...	89.0	92.0
" (Low	...	...	...	...	67.0	73.0
" (Aver	55.0	58.0	67.0	66.0	74.0	81.7
Indianola. Rainfall.....	1.18	2.92	4.30	0.74	0.18	6.80
" No. days rain.	6	7	14	5	3	8
" (High	74.5	76.5	81.5	83.0	90.5	92.4
" (Low	38.0	45.0	45.0	41.0	55.0	70.0
" (Aver	55.5	58.4	67.3	69.1	74.9	81.2

CHRONICLE WEATHER REPORTS SUMMARY.

January.—The first and last weeks but little rain fell; the balance of the month there was more; generally, however, not enough to interfere materially with the marketing of the crop. Month opened cold and closed warm. The second week there were sleet and snow at Galveston.

February.—Weather seasonable, with considerable rain, but no excessive cold. Plantation work made good progress.

March.—Very heavy rains this month, especially in the Gulf and Southwestern States. The Mississippi River very high, and in the third week breaks were reported in the levee on the west side below Memphis. Planting much delayed, being pushed forward under great difficulties in all that section.

April.—Continue heavy rains through the month (reaching 22 inches and 24 hundredths of an inch at Vicksburg), closing up with a frost the last of the month, from Mobile to North Carolina; the frost was reported killing in the northern parts of Georgia, South Carolina and North Carolina, making replanting necessary to some extent in the two former States, but much of the seed was not sufficiently started to be harmed. Nearly all the Southern rivers overflowed—both the Mississippi and its tributaries and the Alabama and its tributaries—being one of the most extensive overflows on record, *the number of acres under water in the Mississippi Valley not having been equaled probably during the last thirty years*, and did not fully subside until in June.

May.—The last few days of April the weather changed to dry, and continued with but very little rain the first week of May, and in some considerable sections throughout the entire month. For instance, the rainfall for the whole month of May was only 22 hundredths of an inch at New Orleans, 16 hundredths at Vicksburg, and 63 hundredths at Memphis. As a result of such prolonged drought following the excessive rains, the ground became baked and the seed could not germinate, except very irregularly; or where the plant was up it did not develop healthfully, dying out in many cases and making very imperfect stands.

June.—Weather during June was more favorable, especially the last half of the month, showers then becoming quite general. The dry weather enabled the planters to keep the fields clean, but the stands were, as a rule, imperfect, and the plant not strong and stocky. Planting in the overflowed districts not completed till after the first of June.

FROM THE AGRICULTURAL BUREAU REPORTS.

The June report says (reporting the condition to June 1st): "The season has been remarkable for heavy and frequent rains during the month of April throughout the cotton States." * * * * "From the first week in May to its close drought was almost universal." * * * * "The stand is therefore very poor, many plants not having made their appearance on the 1st of June."

The July report says: "The cotton planters report" * * * * "an improvement in the condition of the plant in every State." * * * * "As compared with July of last year, condition is higher, except in Florida, Louisiana and Arkansas."

From the foregoing we learn :

First.—That there were all through April excessive rains, resulting in the most extensive overflows known for thirty years.

Second.—That throughout the whole of May there was

scarcely any rainfall west of Georgia and North Carolina, only sixteen hundredths of an inch at Vicksburg, and sixty-three hundredths of an inch at Memphis, &c.

Third.—That in the overflowed sections in the Mississippi Valley planting was not completed until after the first of June.

Fourth.—That on account of the excessive rains, and then of the excessive drought, the stands in a very considerable section were very irregular, imperfect and poorly rooted; and, further, that the late start in the Mississippi Valley made the crop late, and the early frost in the Fall cut the plant before it had matured.

The crop grown during this year (1874) was only 3,833,000 bales, against 3,930,500 bales in 1872, although the acreage was over 12 per cent in excess of 1872.

1875.

The weather summary, including temperature, rainfall and number of days on which it rained, is as follows for the first six months of 1875:

1875.	Jan.	Feb.	March.	April.	May.	June.
Norfolk.... Rainfall, inch.	5.89	2.95	8.09	2.24	2.29	1.38
" " " " " " " "	18	10	19	12	8	8
" " " " " " " "	High. 54.0	76.0	74.0	80.0	95.0	98.5
" " " " " " " "	Low. 14.0	9.0	24.0	27.0	45.0	57.0
" " " " " " " "	Ave. 36.2	37.9	48.7	52.2	65.2	74.9
Wilmington. Rainfall, inch.	5.52	1.97	4.55	3.92	2.84	11.67
" " " " " " " "	No. days rain.	18	9	19	11	8
" " " " " " " "	High. 70.0	73.0	75.0	89.0	99.0	91.0
" " " " " " " "	Low. 21.0	15.0	23.0	28.0	43.0	58.0
" " " " " " " "	Ave. 43.3	45.9	54.4	58.5	63.4	74.2
Charleston. Rainfall, inch.	7.77	4.27	6.37	4.56	8.51	3.15
" " " " " " " "	No. days rain.	18	10	16	10	19
" " " " " " " "	High. 67.0	73.0	73.0	82.0	86.0	95.0
" " " " " " " "	Low. 33.0	23.0	35.0	39.0	59.0	61.0
" " " " " " " "	Ave. 47.3	49.2	57.1	60.8	71.7	78.2
Augusta.... Rainfall, inch.	6.77	5.17	11.88	4.71	1.10	6.59
" " " " " " " "	No. days rain.	17	9	15	10	6
" " " " " " " "	High. 68.0	78.0	79.0	83.0	91.0	97.0
" " " " " " " "	Low. 26.0	22.0	33.0	35.0	49.0	53.0
" " " " " " " "	Ave. 44.9	43.9	55.4	60.9	73.0	78.4
Atlanta.... Rainfall, inch.	5.60	6.92	10.27	4.70	1.84	4.58
" " " " " " " "	No. days rain.	11	7	11	7	5
" " " " " " " "	High. 63.0	67.0	76.0	78.0	92.0	93.0
" " " " " " " "	Low. 11.0	14.0	32.0	32.0	40.0	63.0
" " " " " " " "	Ave. 44.0	46.0	56.0	65.0	77.0	65.0
Savannah.. Rainfall, inch.	8.84	3.50	6.88	5.11	3.20	4.10
" " " " " " " "	No. days rain.	17	9	12	8	12
" " " " " " " "	High. 74.0	80.0	81.0	81.0	90.0	99.0
" " " " " " " "	Low. 34.0	80.0	33.0	40.0	54.0	63.0
" " " " " " " "	Ave. 49.7	50.7	59.2	63.5	72.9	79.4
Columbus.. Rainfall, inch.	5.83	5.57	14.44	3.47	3.68	3.62
" " " " " " " "	No. days rain.	19	8	12	8	5
" " " " " " " "	High. 75.0	62.0	76.0	89.0	95.0	98.0
" " " " " " " "	Low. 33.0	22.0	32.0	44.0	56.0	62.0
" " " " " " " "	Ave. 47.0	49.0	57.0	62.0	70.0	82.6

1875.	Jan.	Feb.	March.	April.	May.	June.
Macon.....Rainfall, inch.	5.33	4.37	12.95	5.56	2.43	3.16
" No. days rain.						
" { High.	70.0	78.0	79.0	80.0	80.0	80.0
" { Low.	20.0	18.0	30.0	3.0	8.0	63.0
" { Ave.	52.0	56.0	63.0	72.0	80.0	87.0
Montgomery..Rainfall, inch.	6.71	7.83	11.56	3.54	1.67	1.41
" No. days rain.	21	16	16	9	7	14
" { High.	74.5	78.5	78.5	83.0	98.0	99.5
" { Low.	18.0	22.0	34.5	39.0	51.0	61.5
" { Ave.	47.2	49.6	57.4	62.6	74.5	80.7
Mobile.....Rainfall, inch.	5.79	7.15	8.33	7.51	1.16	2.45
" No. days rain.	12	9	13	6	5	8
" { High.	72.0	74.0	78.0	77.0	91.0	95.0
" { Low.	25.0	28.0	37.0	41.0	56.0	63.0
" { Ave.	49.8	50.9	60.2	63.2	75.3	81.8
N. Orleans..Rainfall, inch.	8.14	13.85	10.84	8.05	2.53	4.92
" No. days rain.	22	9	15	8	8	13
" { High.	75.0	77.0	79.0	79.5	83.5	92.0
" { Low.	28.5	32.5	38.0	49.5	65.0	68.0
" { Ave.	54.2	55.9	63.5	65.3	76.2	80.1
Shreveport..Rainfall, inch.	3.93	2.67	4.94	3.16	0.91	1.79
" No. days rain.	20	14	16	11	5	9
" { High.	75.0	78.0	80.0	90.0	101.0	104.0
" { Low.	13.0	22.0	27.0	33.0	48.0	59.0
" { Ave.	41.0	50.0	57.0	63.0	75.0	83.0
Vicksburg..Rainfall, inch.	5.48	7.01	14.51	5.07	1.69	4.05
" No. days rain.	16	13	17	8	11	12
" { High.	75.0	76.0	78.0	83.0	91.0	98.0
" { Low.	1.0	21.0	33.0	43.0	51.0	60.0
" { Ave.	42.9	50.0	53.4	61.8	74.6	80.5
Columbus, Miss.—						
" Rainfall, inch.	8.14	11.15	7.61	6.52	1.30	8.39
" No. days rain.	7	13	7	4	4	8
Nashville..Rainfall, inch.	6.15	3.06	8.14	4.25	2.03	5.63
" No. days rain.	15	12	15	13	10	13
" { High.	69.0	75.0	74.0	80.0	89.0	92.0
" { Low.	2.0	9.0	24.0	25.5	40.0	50.0
" { Ave.	33.7	34.2	49.1	56.3	63.3	76.9
Memphis..Rainfall, inch.	7.15	3.34	8.60	3.48	4.21	2.72
" No. days rain.	16	13	19	10	12	6
" { High.	68.0	72.0	79.0	81.0	91.0	95.0
" { Low.	2.0	13.0	26.0	35.0	44.0	55.0
" { Ave.	34.1	40.2	50.6	57.7	68.6	79.1
Galveston..Rainfall, inch.	4.31	2.94	3.51	2.55	1.50	0.89
" No. days rain.	13	10	9	8	5	4
" { High.	70.0	74.0	78.0	80.0	91.0	97.0
" { Low.	24.0	35.0	34.0	48.0	62.0	72.0
" { Ave.	43.3	55.3	62.1	65.9	77.0	83.5
Indianola..Rainfall, inch.	1.17	1.23	1.02	2.51	1.15	0.35
" No. days rain.	8	6	6	4	3	3
" { High.	75.0	80.0	80.0	82.0	89.0	95.0
" { Low.	17.0	33.0	37.0	32.0	59.0	71.0
" { Ave.	46.0	56.4	63.4	66.4	76.3	82.2
Corsicana..Rainfall, inch.	1.98	0.76	2.33	2.26	2.03	0.79
" No. days rain.	11	10	11	8	9	2
" { High.	73.0	79.0	86.0	87.0	93.0	102.0
" { Low.	3.0	19.0	24.0	33.0	43.0	57.0
" { Ave.	36.8	49.5	55.8	61.3	72.9	79.5

CHRONICLE WEATHER REPORTS SUMMARY.

January.—The whole month of January was rainy. It opened warm, sultry and wet, with heavy rain in Texas and Gulf States, becoming more severe, not only in the Gulf States, but also in the Atlantic States, closing up with ice and snow at Galveston. Balance of the month was disagreeable, with light rains or drizzle at all points, making roads in many sections impassable.

February.—The first week the rains were light at all points, but subsequently there were heavy rains, especially in the Gulf States, followed by ice and snow in the north of Texas.

March.—Very heavy rains in the South this month. Weather cold. In the second week there was a very heavy snow-storm, snow falling to the depth of 14 inches at Memphis, and in the north of Texas was the hardest known for years.

April.—The first week of April was unfavorable for planting, it being quite cold, with frost near Sareveport. Mississippi River overflowed and Arkansas River threatening. Second and third weeks were more favorable, although the temperature continued lower than desirable. Some, but little, replanting was necessary in portions of Texas, on account of previous frost. Fourth week the weather was satisfactory, except some severe frosts, doing, however, very little damage. There were frosts during the month at Galveston, Memphis, Augusta, Charleston, Sareveport, Selma, Macon and Atlanta, which were killing at some places, but no material damage done, as cotton was not generally up.

May.—The early part of month was cold, but subsequently it turned warmer and more favorable, with seasonable rains, but not excessive, and the plant made very good progress, the fields being kept clean.

June.—Weather was very favorable almost everywhere, the temperature being higher and showers very general. Crop reports, therefore, were satisfactory, growth being rapid, stands unusually good, with the fields remarkably clean. A bloom was reported in Monroe county, Ala., June 8. In our acreage report on the 12th June, we state that the condition was very satisfactory. "Without doubt, taking the country "as a whole, there has not been since the war a more promising crop "than this one. The stand is as nearly perfect as possible, &c."

FROM THE AGRICULTURAL BUREAU REPORTS.

The June report says: "In a larger portion of the cotton area, at the "usual time for planting, the soil was wet and cold in Atlantic coast districts, and in a less degree in more western areas, and germination was "retarded, but not destroyed. Afterward the weather became more favorable for growth and the chopping-out process, with a tendency in "places to an injurious lack of moisture." * * * "The stand is much "better than that of last year, and the plants are more advanced in "growth, notwithstanding their late start, and the crop is generally quite "clean."

The July report says: "The condition of the crop approximates a full "average, showing an improvement during June in all the cotton States "except Texas, where the prevalence of drought in some localities, and "some local injuries by cut-worms, cotton-caterpillars and grasshoppers, reduced the promise of the crop 3 per cent."

From the foregoing we learn :

First—That the weather was cold in April and during the first week of May, but subsequently was very favorable.

Second—That the stands secured were excellent, the best since the war, and the fields were very clean and well worked.

The crop grown during this year (1875) was 4,669,000 bales, against 3,833,000 bales in 1874, on an acreage increased only about 6 per cent.

1876.

The temperature, rainfall and number of days of rain for the first six months of 1876 were as follows :

1876.	Jan.	Feb.	March.	April.	May.	June.
Norfolk Rainfall, inch.	1.37	3.96	4.10	2.72	4.42	5.09
" No. days rain.	7	11	9	14	11	6
" High.	75.0	73.0	73.0	83.5	89.0	100
" Low.	21.0	19.0	19.0	37.0	38.0	53.0
" Aver.	47.7	45.0	46.5	55.3	65.7	78.1
Wilmington. Rainfall, inch.	0.52	3.04	4.54	2.82	3.44	12.44
" No. days rain.	6	10	11	8	9	9
" High.	76.0	77.0	75.0	87.0	93.0	98.0
" Low.	20.0	24.0	22.0	3.0	38.0	53.0
" Aver.	51.9	51.1	52.6	60.8	67.5	76.6
Charleston. Rainfall, inch.	0.63	2.43	2.54	4.93	3.77	11.98
" No. days rain.	7	6	11	9	10	11
" High.	76.0	78.0	76.0	89.0	88.0	97.0
" Low.	28.0	31.0	28.0	46.0	47.0	68.0
" Aver.	53.4	54.6	56.6	64.3	71.4	79.9
Augusta Rainfall, inch.	1.20	2.98	2.96	4.72	1.97	7.96
" No. days rain.	6	12	10	8	12	10
" High.	78.0	78.0	81.0	85.0	95.0	97.5
" Low.	22.0	25.0	25.0	42.0	43.0	62.0
" Aver.	53.6	52.3	54.8	63.9	72.1	78.7
Atlanta Rainfall, inch.	3.32	5.37	5.91	6.01	5.00	3.25
" No. days rain.	6	9	6	7	10	10
" High.	71.0	74.0	74.0	80.0	86.0	93.0
" Low.	20.0	16.0	22.0	42.0	46.0	62.0
" Aver.	56.0	51.0	55.0	66.0	73.0	80.0
Savannah. Rainfall, inch.	2.39	2.21	2.71	5.74	2.25	18.80
" No. days rain.	6	9	9	9	9	20
" High.	78.0	80.0	80.0	86.0	91.0	99.0
" Low.	27.0	23.0	30.0	46.0	50.0	65.0
" Aver.	56.8	56.5	58.7	66.7	74.0	80.6
Columbus. Rainfall, inch.	4.63	2.42	7.90	9.19	4.45	4.81
" No. days rain.	4	5	9	7	7	11
" High.	70.0	73.0	78.0	82.0	88.0	96.0
" Low.	25.0	22.0	26.0	44.0	46.0	64.0
" Aver.	52.0	52.0	59.0	64.0	73.0	80.0
Macon Rainfall, inch.	1.46	4.23	4.06	7.10	1.85	5.88
" No. days rain.	7	11	11	11	11	11
" High.	76.0	77.0	77.0	88.0	92.0	97.0
" Low.	31.0	23.0	24.0	40.0	46.0	64.0
" Aver.	6.0	60.0	6.0	74.0	8.0	8.0
Montgomery. Rainfall, inch.	3.70	5.07	7.33	10.99	6.55	4.85
" No. days rain.	9	12	9	9	14	10
" High.	77.0	78.0	77.0	89.0	92.5	99.0
" Low.	27.0	24.0	28.0	45.0	46.5	61.0
" Aver.	54.8	54.5	54.6	65.4	73.5	79.6
Mobile Rainfall, inch.	3.14	4.32	8.01	3.88	4.33	3.35
" No. days rain.	6	11	9	10	6	7
" High.	72.0	75.0	76.0	82.0	89.0	98.0
" Low.	32.0	28.0	31.0	42.0	48.0	63.0
" Aver.	56.6	55.3	55.8	66.2	70.0	80.3
N. Orleans. Rainfall, inch.	4.43	8.20	11.32	6.41	7.10	6.20
" No. days rain.	7	16	11	8	15	11
" High.	77.0	78.0	79.0	82.5	86.0	93.5
" Low.	38.5	36.0	36.5	53.5	54.0	68.0
" Aver.	60.3	59.0	59.9	69.1	74.8	80.6
Shreveport. Rainfall, inch.	7.26	2.68	11.67	5.83	9.17	2.08
" No. days rain.	14	8	14	10	12	10
" High.	78.0	80.0	79.0	88.0	90.0	95.0
" Low.	30.0	24.0	26.0	47.0	47.0	61.0
" Aver.	54.0	55.0	54.0	67.0	73.0	79.0
Vicksburg. Rainfall, inch.	3.81	5.18	11.21	4.89	6.24	1.74
" No. days rain.	6	8	11	10	12	7
" High.	79.0	77.0	81.0	85.0	89.5	97.0
" Low.	28.0	24.0	27.0	47.0	49.0	63.0
" Aver.	56.1	55.4	54.2	66.0	72.8	79.4
Columbus, Miss. —						
Rainfall, inch.	4.69	3.11	9.57	6.79	4.96	1.86
" No. days rain.	9	6	9	8	7	7
Little Rock. Rainfall, inch.	8.17	2.56	9.05	4.02	5.96	3.71
Nashville. Rainfall, inch.	5.16	2.32	5.70	2.86	4.94	5.76
" No. days rain.	10	5	11	9	11	14
" High.	73.0	73.0	76.0	80.0	90.0	94.0
" Low.	17.0	9.0	14.0	37.0	42.0	58.0
" Aver.	47.3	46.2	46.6	60.5	70.3	76.5
Memphis. Rainfall, inch.	7.65	1.33	11.03	4.51	8.49	2.70
" No. days rain.	6	4	14	6	9	13
" High.	73.0	75.0	78.0	85.0	88.0	97.0
" Low.	23.0	17.0	18.0	44.0	48.0	58.0
" Aver.	47.9	48.6	47.4	63.2	70.9	77.1

1876.	Jan.	Feb.	March	April.	May.	June.
Galveston.. Rainfall, inch.	1.49	4.79	5.94	2.65	10.27	2.63
" No. days rain.	7	8	9	6	8	11
" (High.	75.0	74.0	76.0	84.0	89.0	94.0
" Ther... Low.	43.0	35.0	36.0	55.0	54.0	70.0
" Ave.	60.9	60.0	61.0	69.7	76.1	82.5
Indianola.. Rainfall, inch.	1.30	1.89	5.86	0.32	0.32	1.19
" No. days rain.	8	9	6	2	3	9
" (High.	78.0	79.0	80.0	85.0	87.0	94.0
" Ther... Low.	42.1	34.0	41.0	51.0	58.0	70.0
" Ave.	61.5	60.0	62.9	69.4	75.5	82.5
Corsicana.. Rainfall, inch.	3.16	1.84	3.61	3.96	4.56	3.09
" No. days rain.	13	5	9	5	12	8
" (High.	77.0	78.0	81.0	90.9	95.0	99.0
" Ther... Low.	26.0	24.0	25.0	41.0	43.0	58.0
" Ave.	52.2	55.1	53.9	67.0	71.8	77.3
Dallas..... Rainfall, inch.	6.19	3.65	1.82	0.84	0.83	3.51

CHRONICLE WEATHER REPORTS SUMMARY.

January.—During the latter part of December, 1875, there were heavy rains in the Southwest, and these were continued in the second, third and last weeks of January, the greatest rainfall being in the section of country marked off by taking in Dallas, Shreveport, Little Rock, Memphis and Nashville. Crop movement was interfered with in much of that district by bad roads.

February.—Rains continued in portions of the South during much of this month, but covering a different section, being chiefly confined to the lower half of the Gulf States. On the 19th our Galveston correspondent telegraphed that they had not had a particle of frost yet; oranges, figs, grapes, apples, peaches to a moderate extent still maturing.

March.—The greater portion of the first two weeks of March was favorable, with seasonable showers, and satisfactory progress was made in farm preparations. The third week was rainy, and during the following week a very severe storm passed over a large portion of the South, attended with snow. It snowed 8 inches at Little Rock; 6 inches at Columbus, Miss., &c.; and was followed by severe frosts everywhere, except in some of the extreme southern sections.

April.—Excessive rains in the West and Northwest early in the month resulted in an overflow of the Mississippi which at one time threatened to be the most disastrous ever known. There were also rains in Alabama, causing the rivers there to overflow. But the waters quickly receded, and towards the end of the month the fears had subsided, though the Mississippi had not wholly returned to its banks again. Subsequently the weather was almost everywhere favorable, and good progress was made in getting in the crops, so that the month closed with the condition good, though the start, especially in the Gulf States, was late.

May.—The weather during May was quite favorable everywhere and the plant made good progress. A limited portion of the Mississippi Valley between Memphis and Vicksburg remained overflowed till towards the close of the month. But this did not materially decrease the planting. The cotton came up well and the fields were clean.

June.—There was a very heavy rainfall at many places this month, but it came in severe local showers and did not appear to harm cotton much, as the fields began the month well worked and clean, and the rain was generally confined to the Atlantic coast. In Georgia and South Carolina there was a flood which carried away bridges and destroyed wheat and corn, but not much cotton. Elsewhere the showers were mostly reported as beneficial. The month closed with good stands everywhere, though not quite equal to the condition of the previous year, as that was very perfect. Our Galveston correspondent telegraphed June 17 that "crop accounts throughout the State are surprisingly favorable,

"and, despite the late planting, the prospect is, up to this date, the best we have enjoyed for years."

FROM THE AGRICULTURAL BUREAU REPORTS.

The June report says: "The June returns indicate a slight reduction of area in cotton, comparatively late planting, good stands, except in cases of too early planting or inundation; growth not up to the average for the season; healthy and improving condition, and clean culture, with the exceptions caused by heavy rains stimulating growth and preventing work."

The July report says: "Cotton in the first week in July is in a condition of healthy growth—less favorable than in July of last year—well cultivated and reasonably clear of grass."

From the foregoing we learn:

First.—That the weather early in the season was very rainy, especially in portions of the Southwest. This weather culminated in an overflow of the Mississippi and the Alabama rivers in April, subsiding rapidly, however, and almost wholly in April, though not entirely until late in May. During May good weather prevailed almost everywhere, and in June, also, except along the Atlantic coast; and even there the showers did not work much harm, as the fields in those States were in excellent condition.

Second.—That the start was late in the West and Southwest, but the fields were clean and well worked everywhere, and the stand, though not as perfect as in 1875, was yet very good.

1877.

The temperature and rainfall for the first six months of 1877 have been as follows:

1877.	Jan.	Feb.	March	April.	May.	June.
Norfolk.... Rainfall, inch.	3.85	1.47	4.85	9.98	2.84	4.79
" No. days rain.	14	5	16	17	13	17
" Ther... { High.	73.0	66.0	77.0	83.0	96.0	99.0
" { Low.	16.0	27.0	29.5	38.0	43.0	59.0
" { Aver.	39.1	43.0	47.4	55.0	63.1	75.5
Wilmington. Rainfall, inch.	2.37	1.65	4.52	6.61	2.36	7.48
" No. days rain.	10	6	12	11	10	13
" Ther... { High.	..	....	....	....	....	....
" { Low.	..	....	....	....	....	....
" { Aver.	46.1	48.1	52.4	67.1	64.5	76.5
Charleston.. Rainfall, inch.	4.14	2.96	7.86	15.00	2.71	10.31
" No. days rain.	11	8	12	12	9	12
" Ther... { High.	71.0	70.0	74.0	85.0	90.0	100.0
" { Low.	26.0	35.0	32.0	43.0	40.0	63.0
" { Aver.	51.2	51.7	56.8	63.0	65.8	81.2
Augusta... Rainfall, inch.	4.76	4.30	5.98	5.63	1.18	6.67
" No. days rain.	15	7	11	15	8	1
" Ther... { High.	78.0	73.0	79.0	85.0	94.0	....
" { Low.	27.0	32.0	38.0	42.0	44.0	....
" { Aver.	48.1	49.5	56.0	64.1	70.2	81.7

1877.		Jan.	Feb.	March.	April.	May.	June.
Atlanta ...	Rainfall, inch.	4.45	2.17	5.35	8.14	0.95	4.07
"	No. days rain.	13	4	7	13	6	9
"	{ High.	65.0	66.1	70.0	80.0	8.0	92.0
	{ Low.	10.0	31.0	24.0	46.0	46.0	60.0
	{ Aver.	53.0	5.0	5.0	67.0	76.0	83.0
Savannah.	Rainfall, inch.	2.63	1.71	4.25	8.82	2.01	8.52
"	No. days rain.	10	7	12	14	8	14
"	{ High.	78.0	72.0	79.0	85.0	94.0	9.0
	{ Low.	27.0	35.1	3.0	42.0	48.0	59.0
	{ Aver.	54.1	52.5	5.1	65.1	70.6	81.3
Columbus.	Rainfall, inch.	6.80	3.99	10.17	7.96	1.00	7.16
"	No. days rain.	8	8	7	8	2	8
"	{ High.	71.0	65.0	70.0	80.0	9.0	95.0
	{ Low.	18.0	37.0	35.0	46.0	49.0	6.0
	{ Aver.	46.0	49.0	55.0	65.0	72.0	82.0
Macon.....	Rainfall, inch.	4.40	2.20	5.23	4.64	1.20	4.39
"	No. days rain.	....	....	....	....	....	....
"	{ High.	72.0	70.0	74.0	81.0	9.0	96.0
	{ Low.	16.0	30.0	24.0	42.0	42.0	6.0
	{ Aver.	47.0	4.0	53.0	81.0	6.0	80.0
Montgomery.	Rainfall, inch.	6.67	2.68	7.17	10.36	0.82	2.94
"	No. days rain.	15	8	9	16	3	13
"	{ High.	7.0	68.0	76.0	82.0	94.0	99.0
	{ Low.	16.0	31.5	2.0	4.5	4.0	57.0
	{ Aver.	49.5	52.3	5.3	64.4	72.0	80.8
Mobile.....	Rainfall, inch.	6.30	1.10	5.94	8.40	1.68	7.07
"	No. days rain.	16	5	9	11	3	9
"	{ High.	70.0	72.0	76.0	83.0	91.0	100.0
	{ Low.	1.0	3.0	33.0	39.0	51.0	62.0
	{ Aver.	50.1	53.4	57.5	65.9	72.8	82.8
N. Orleans..	Rainfall, inch.	5.30	0.98	4.94	4.79	1.48	2.75
"	No. days rain.	16	8	10	14	8	8
"	{ High.	....	....	....	....	....	....
	{ Low.	....	....	....	....	....	....
	{ Aver.	53.7	55.9	60.7	6.6	7.5	81.3
Shreveport.	Rainfall, inch.	2.84	2.48	3.87	5.42	1.24	2.55
"	No. days rain.	4	4	12	16	8	14
"	{ High.	72.0	72.0	83.0	8.0	92.0	96.0
	{ Low.	19.0	35.0	31.0	48.0	47.0	5.0
	{ Aver.	44.0	2.0	58.0	65.1	47.0	80.0
Vicksburg..	Rainfall, inch.	3.61	3.26	4.83	8.88	0.69	3.76
"	No. days rain.	18	12	12	16	4	13
"	{ High.	73.0	73.0	79.0	79.0	9.0	97.0
	{ Low.	1.0	31.0	29.0	47.0	46.0	59.0
	{ Aver.	47.6	5.3	57.2	64.1	72.9	79.4
Columbus, Miss.—							
"	Rainfall, inch.	2.22	3.01	5.61	9.22	2.51	2.33
"	No. days rain.	11	5	9	11	3	10
Little Rock.	Rainfall, inch.	3.02	3.01	2.90	13.84	0.70	10.61
"	No. days rain.	....	....	....	....	....	....
"	{ High.	....	....	....	....	....	....
	{ Low.	....	....	....	....	....	....
	{ Aver.	....	....	....	....	....	....
Nashville..	Rainfall, inch.	4.05	1.06	4.95	9.47	1.25	6.02
"	No. days rain.	12	5	12	14	5	14
"	{ High.	66.0	66.0	....	50.0	....	....
	{ Low.	7.0	2.0	....	38.0	....	....
	{ Aver.	37.0	4.0	47.4	49.2	67.3	77.0
Memphis...	Rainfall, inch.	4.31	1.54	4.24	13.90	1.81	18.16
"	No. days rain.	17	9	17	17	8	17
"	{ High.	69.0	67.0	79.0	80.0	92.0	94.0
	{ Low.	7.0	30.0	23.0	40.0	4.0	55.0
	{ Aver.	39.3	46.1	50.0	5.3	70.5	77.8
Galveston..	Rainfall, inch.	4.53	1.12	1.35	8.36	1.80	2.68
"	No. days rain.	8	5	5	9	5	8
"	{ High.	64.0	6.0	7.0	8.0	9.0	92.0
	{ Low.	16.0	46.0	3.0	54.0	59.0	64.0
	{ Aver.	50.7	56.2	62.1	68.8	64.8	81.5
Indianola...	Rainfall, inch.	0.91	1.58	2.74	1.64	2.20	4.81
"	No. days rain.	9	7	10	6	5	8
"	{ High.	....	72.0	....	....	....	....
	{ Low.	....	4.0	....	....	....	....
	{ Aver.	49.6	77.0	63.6	70.1	75.3	81.0
Corsicana...	Rainfall, inch.	1.06	6.84	4.81	6.01	4.75	4.56
"	No. days rain.	12	9	12	11	12	10
"	{ High.	74.0	72.0	....	....	95.0	96.0
	{ Low.	1.0	3.0	....	....	47.0	50.0
	{ Aver.	40.0	51.3	58.1	63.5	71.3	78.6
Dallas.....	Rainfall, inch.	0.33	2.77	2.87	6.05	4.35	2.60

For the sake of easier comparison, we here insert the rainfall each month for the past four years.

RAINFALL FOR FOUR YEARS, JANUARY TO JUNE, INCLUSIVE.

STATIONS.	Jan.	Feb.	March.	April.	May.	June.
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>
Wilmington. 1877..	2.37	1.65	4.52	6.61	2.36	7.18
" 1876..	0.52	3.04	4.51	2.82	3.41	12.41
" 1875..	5.52	1.97	4.55	3.92	2.81	11.67
" 1874..	5.14	6.51	3.72	2.88	5.07	2.81
Charleston 1877..	4.41	2.96	7.86	15.00	2.71	10.31
" 1876..	0.63	2.43	2.54	4.93	3.77	14.98
" 1875..	7.77	4.27	6.37	4.56	8.51	3.15
" 1874..	3.15	10.45	3.15	2.95	5.50	2.29
Augusta 1877..	4.76	4.30	5.98	5.63	1.18	6.67
" 1876..	1.20	2.98	2.96	4.72	1.97	7.96
" 1875..	6.77	5.17	11.88	4.71	1.10	6.59
" 1874..	3.41	7.22	7.78	6.23	3.88	3.29
Atlanta 1877..	4.45	2.17	5.35	8.14	0.95	4.07
" 1876..	3.32	5.37	5.91	6.01	5.00	3.25
" 1875..	5.60	6.92	10.27	4.79	1.81	4.58
" 1874..	3.11	6.86	7.38	10.42	3.00	7.71
Savannah 1877..	2.63	1.71	4.25	8.82	2.01	8.52
" 1876..	2.39	2.21	2.71	5.74	2.25	18.80
" 1875..	8.84	3.50	6.88	5.11	3.20	4.10
" 1874..	2.07	9.71	2.85	2.69	4.85	4.85
Columbus, Ga. 1877..	6.80	3.99	10.17	7.95	1.00	7.16
" 1876..	4.63	2.42	7.90	9.19	1.45	4.81
" 1875..	5.88	5.57	14.41	3.47	3.68	3.62
Macon 1877..	4.40	2.20	5.23	4.61	1.20	4.39
" 1876..	1.46	4.23	4.06	7.10	1.85	5.88
" 1875..	5.33	4.37	12.95	5.53	2.43	3.16
" 1874..	1.77	6.80	7.88	9.26	1.45	3.18
Montgomery. 1877..	6.67	2.68	7.17	10.36	0.82	2.94
" 1876..	3.70	5.07	7.33	10.99	6.55	4.85
" 1875..	6.71	7.86	11.56	3.54	1.67	1.94
" 1874..	3.69	6.57	10.66	9.45	2.03	4.31
Mobile 1877..	6.30	1.40	5.94	8.40	1.68	7.07
" 1876..	3.14	4.32	8.01	3.88	4.33	5.35
" 1875..	5.79	7.15	8.39	7.51	1.46	2.45
" 1874..	2.48	2.72	10.57	10.92	1.23	5.69
New Orleans. 1877..	5.30	0.98	1.91	4.79	1.48	2.75
" 1876..	4.43	8.20	11.32	6.41	7.10	6.20
" 1875..	8.44	13.85	10.81	8.05	2.53	1.92
" 1874..	1.68	3.68	7.57	13.62	0.22	9.62
Shreveport 1877..	2.84	2.48	3.87	5.42	1.21	2.55
" 1876..	7.26	2.68	11.67	5.83	9.47	2.08
" 1875..	3.93	2.67	4.91	3.46	0.91	1.79
" 1874..	3.51	7.58	9.27	10.61	1.19	1.35
Vicksburg 1877..	3.61	3.26	4.83	8.88	0.69	3.76
" 1876..	3.81	5.18	11.21	4.89	6.21	1.71
" 1875..	5.18	7.01	11.51	5.07	1.69	4.05
" 1874..	5.27	3.47	9.86	22.24	0.16	3.43
Columbus, Miss. 1877..	2.22	3.01	5.61	9.22	2.51	2.33
" 1876..	4.69	3.11	9.57	6.79	4.96	1.86
" 1875..	8.14	11.45	7.61	6.52	1.30	8.39
Little Rock. 1877..	3.02	3.01	2.90	13.84	0.70	10.64
" 1876..	8.47	2.56	9.05	4.02	5.96	3.71
Nashville 1877..	4.05	1.06	4.95	9.47	1.25	6.02
" 1876..	5.16	2.32	5.70	2.86	4.91	5.76
" 1875..	6.15	3.06	8.14	4.25	2.03	5.63
" 1874..	5.22	9.23	5.26	11.84	1.49	2.87
Memphis 1877..	4.31	1.51	4.21	13.90	1.81	18.16
" 1876..	7.65	1.33	11.03	4.51	8.19	2.70
" 1875..	7.45	3.31	8.60	3.18	4.21	2.72
" 1874..	2.88	4.10	6.61	10.16	0.63	2.22
Galveston. 1877..	4.53	1.12	1.35	8.36	1.80	2.68
" 1876..	1.19	4.79	5.91	2.65	10.27	2.63
" 1875..	4.31	2.91	3.51	2.55	1.50	0.89
" 1874..	1.37	3.11	3.09	3.38	5.80	1.68
Indianola. 1877..	0.91	1.58	2.71	1.64	2.20	4.81
" 1876..	1.30	1.89	5.86	0.32	0.32	1.19
" 1875..	1.17	2.23	1.02	2.51	1.45	0.35
" 1874..	1.18	2.92	1.30	6.71	0.18	6.80

CHRONICLE WEATHER REPORTS SUMMARY.

January.—The weather during January was unprecedented for severity, it being extremely cold all through the month, with heavy snow and rain at very many points, interfering with the movement of the crop and making the roads impassable. Snow fell to the depth of several inches at Shreveport, and ice formed three inches thick. Killing frosts were reported from Texas and Florida. The snow in the northern part of Texas was eighteen inches deep, the heaviest ever known at that point. The cold was especially remarkable in the Southwest; the thermometer at Little Rock fell to 4 degrees below zero. Ice and frost were general. There were also very heavy rains in some sections later in the month.

February.—Weather seasonable and warmer, with light rains through the month. Ploughing and other preparations made good progress, and an early start was anticipated, especially in the Southwest. Ploughing was slightly retarded by rains in upper Texas the latter part of the month, and at Dallas by frost. Hatching out of grasshoppers was reported from Texas and caused considerable anxiety.

March.—Weather fairly favorable during the month. The rainfall was quite large in the Atlantic States, reaching at Columbus, Ga., a depth of 10.17 inches. Grasshoppers were still very abundant in Texas, and caused considerable uneasiness, but very little harm had been done. There were killing frosts during the month at Corsicana, Dallas and Mobile, but no harm done. Ice in Alabama and Corsicana, and snow at Little Rock. Cold interfered a little with progress in Mississippi and Arkansas. Work generally well advanced, and crops made good progress. Month closed warmer.

April.—The month opened with seasonable weather and farm work well advanced. After the first week heavy rains were very frequent, causing a suspension of planting in upper Mississippi, Arkansas and Tennessee. At Columbus, Miss., the lowlands were under water, and from Alabama and Tennessee also came reports of lowlands submerged, and damage was feared by overflow of the Mississippi and tributaries. The last of the month the grasshoppers in Texas took wing and commenced migrating northwest. The conditions towards the close were generally favorable in the Atlantic States and Alabama, and lower half of Louisiana and Mississippi. The heaviest rainfalls of the month were at Charleston, 15 inches, and Montgomery 10.36 inches. Also a severe storm at Galveston.

May.—The first two weeks of May continued rainy, but much less so than during April, with temperature somewhat higher, though too low at some points. During the remainder of the month the weather was decidedly more favorable, there being very little rain, but the crop was everywhere at least two weeks late. This dry time gave good opportunity for chopping out, and our correspondents generally reported the fields well cultivated and the plant developing promisingly, though small and backward.

June.—The month of June was showery everywhere, with very heavy rains at a few places. Memphis reported thirteen inches and forty-four hundredths on the 8th and 9th of June. It proved to be quite local, however, and crop reports continued increasingly favorable until towards the close of the month, when some sections began to complain of too much rain. The Arkansas River overflowed the first of the month, covering a very considerable section, but receded, and the land was again planted, though late.

Chronicle average report for June 10 says (see Chronicle, June 23):
 "Generally speaking, the crop is everywhere, except in the lower half of Texas, more backward than last year, say from ten to twenty days.

"That, however, is, we think, the only unfavorable circumstance in the present surroundings, outside of North Carolina, a part of South Carolina, and the flood in the Arkansas Valley. Excluding these limited sections, the plant is almost everywhere strong, healthy, unusually clean, and well cultivated, though small, but growing vigorously since the late rains."

FROM THE AGRICULTURAL BUREAU REPORTS.

The June report (for the month of May) says: "The condition of cotton was lower in June than at that date in the two past years, but higher than in 1874." * * * * * "In a word, the season has been too cool for cotton, too wet at the time of planting, and too dry since in all of the area except Texas. The plant is now generally small, but healthy, free from weeds, and in condition to improve rapidly with favorable weather."

The July report (for the month of June) says: "The July returns, covering an area of 361 of the best counties in the cotton belt, and representing six-tenths of the entire production, indicate a general condition represented by 93 4-10—four per cent less than the July condition of 1876, and seven per cent better than the returns of 1873 and 1874."

From the foregoing we learn:

First—That the early season was cold and rainy, and the seed was, in general, planted late; that the crop was two weeks late in starting. Good weather in May gave opportunity for chopping out, so that on the first of June the fields were clean and well worked, and the showers in June, though very heavy at places, were more local than usual and developed the plant, while sufficient time was found to keep the weeds down.

Second—That the stand, though late, was at the same time very satisfactory, with the fields almost everywhere well worked and clean.

DEDUCTIONS FROM THE ABOVE STATEMENTS.

We have, in the above, brought together all the important details of weather and crop development during the first six months of each year since 1870. For the earlier portion of this record some of our data are less full than for later seasons, but they are all sufficiently complete to illustrate the importance of special conditions in the cultivation and growth of the cotton plant. The account we gave, in the opening of this chapter, of the habits of the plant and modes of cultivation, prepared us for the results

which are here made evident. A growth so tender in its early life showed that it required careful working and watching, and favorable conditions every way until it had safely passed its younger days, to bring out its highest capabilities. If the reader will recall the trials from seed to stand, enumerated in previous pages, and interpret each season's weather record, given above, in the light of those facts, the connection between those conditions and the final results will be easily and clearly understood. To see, however, just where our facts lead us, let us recapitulate the leading features of the planting and germinating season each year.

- 1871 *April* was more favorable than the last half of March, the whole of March being cold and rainy. *May* very cold and rainy, except Texas, where there was very little rain. *June* very rainy everywhere, except a portion of the interior.
- 1872 *April* very favorable, except the second week, when there was a severe storm, making the rivers overflow. *May*, first three weeks too dry, but the last week splendid showers everywhere. *June*, fine month for growth and cultivation. The last week some complaints of too much rain.
- 1873 *April* cold and dry. *May*, first two weeks favorable everywhere, but last two weeks rainy, more especially in coast half of States. *June*, too rainy in about same half of the Atlantic and Gulf States, but upper half, and almost all of Arkansas and Tennessee, favorable.
- 1874 *April*, like March, was very rainy. All rivers overflowed. Worst flood for 30 years. *May*, a severe drought in almost all the South, except Atlantic States. *June*, more favorable, especially last half of month; but planting in the flooded district of the Mississippi Valley and its tributaries not completed till after June 1st.
- 1875 *April*, like March, was all of it too cold, especially the first week; otherwise the month favorable, the temperature gradually moderating. *May* continued cold first two weeks, but subsequently was warmer and otherwise very favorable. *June*, fine growing weather nearly everywhere.
- 1876 *April*, excessive rains in the Western and Gulf States early part of month, causing rivers to overflow, but they quickly receded in good part; last twenty days generally favorable. *May* very favorable almost everywhere, except heavy local showers at few points; fields well worked. *June*, some very heavy showers, but almost wholly confined to the counties near the Atlantic coast; elsewhere favorable.

In connection with this summary of the weather conditions for the months named, let us bring before us in concise form the results as to each crop. We omit from

this table, as well as from the previous statement, this year's record, as the actual yield is still a matter of estimate.

Year.	Stand.	Acreage Planted.	Total Crop.	Yield per Acre.
1870	Plant well advanced and stand excellent. Fields clean.	9,985,000, 13.90 p. ct. <i>increase on</i> 1869.	4,352,000, 37.94 p. ct. <i>increase on</i> 1869.	191 lbs.
1871	Start early, but stand very poor. Fields grassy. Plant weak and sickly.	8,911,000, 10.75 p. ct. <i>decrease on</i> 1870.	2,974,000, 31.66 p. ct. <i>decrease on</i> 1870.	147 lbs.
1872	Start about average date. Stand very good. Fields well worked and clean. Plant strong.	9,780,000, 9.75 p. ct. <i>increase on</i> 1871.	3,930,500, 32.13 p. ct. <i>increase on</i> 1871.	177 lbs.
1873	Start was late. Stand was good and fields clean in two-thirds of the South; in the other third, poor and grassy.	10,816,000, 10.59 p. ct. <i>increase on</i> 1872.	4,170,000, 6.09 p. ct. <i>increase on</i> 1872.	169 lbs.
1874	Start late everywhere. Stand generally very irregular and imperfect, and in the Mississippi Valley very late. Fields clean.	10,982,000, 1.54 p. ct. <i>increase on</i> 1873.	3,833,000, 8.08 p. ct. <i>decrease on</i> 1873.	154 lbs.
1875	Start at first late, but subsequent progress rapid. Stand excellent—the best since the war. Fields clean and well worked.	11,635,000, 5.95 p. ct. <i>increase on</i> 1874.	4,669,000, 21.81 p. ct. <i>increase on</i> 1874.	177 lbs.
1876	Start late in West and Southwest, but elsewhere early. Stand very good, but not quite as good as last year. Fields generally clean and well cultivated.	11,500,600, 1.16 p. ct. <i>decrease on</i> 1875.	4,485,000, 3.94 p. ct. <i>decrease on</i> 1875.	171 lbs.

This table is very interesting. Of course, until the weather data and progress of the plant during the subsequent six months have been similarly analyzed, we cannot fully read the lessons of the record before us. Yet, even now, we can see that there is a wonderful coincidence between a stand gained and a yield secured, the former being apparently a guaranty of the latter. We can imagine, however, that the conditions subsequent to June might be such as to destroy this guaranty. All that can be absolutely affirmed at this point in our inquiry, is, the subsequent conditions never have been sufficiently unfavorable during the years covered by our record; on the contrary, there is a constant

and remarkable relation each season between the final yield and the reported stand. For instance :

- In 1870 when the STAND was *perfect* an *increase* in the acreage compared with the previous year of 13·90 per cent gave an *increase* in the yield of 37·94 per cent.
- In 1871 when the STAND was *poor, sickly and grassy*, a *decrease* in acreage compared with the previous year of 10·75 per cent gave a *decrease* in the yield of 31·66 per cent.
- In 1872 when the STAND was *very good*, an *increase* in the acreage compared with the previous year of 9·75 per cent gave an *increase* in the yield of 32·13 per cent.
- In 1873 when the STAND was two-thirds *good* and one-third *poor*, an *increase* in the acreage of 10·59 per cent gave an *increase* in the yield of 6·09 per cent.
- In 1874 when the STAND was *irregular and imperfect*, but *clean*, an *increase* in the acreage of 1·54 per cent gave a *decrease* in the yield of 8·08 per cent.
- In 1875 when the STAND was *excellent*, an *increase* in the acreage of 5·95 per cent gave an *increase* in the crop of 21·81 per cent.
- In 1876 when the STAND was *very good*, a *decrease* in the acreage of 1·16 per cent gave a *decrease* in the crop of 3·94 per cent.

But we shall gain more light on these points in subsequent chapters; and before dwelling longer upon this feature of the earlier growth, it will be desirable, perhaps, to bring out in the same manner the later development.

CHAPTER VI.

SUMMER AND FALL GROWTH.

JULY TO DECEMBER.

Formation of the bud, its shape, etc.—The blossom, changes in color, when it shuts and falls—Formation of the boll—Habits of the blossom and plant in relation to the sun—The roots and their growth—The tap root and what develops it—Definition of bottom crop, middle crop and top crop—Cotton enemies, lice, rust, shedding, boll worms, caterpillars, etc.—Number of bolls to make a pound of lint, etc.—Weather data from July to December, 1870 to 1877—Date of killing frost and end of picking season in each State—Explanation of influences affecting each crop, from seed to picking, etc.

We have next to consider the summer growth of cotton, in conjunction with its later progress and ingathering, that we may know the precise effect on the crop of each successive condition, and may measure accurately the relationship between the earlier and later development.

When the cotton plant is about twelve inches high it begins to throw out limbs, with leaves about four inches apart, having at every joint a form, square or shape;—all these names being used for what is really the bud. This bud, on its first appearance, is triangular in outline, with three leafy bracts on the outside, the same green leaflets so often found in the lint, being carelessly picked off with the cotton. The blossom opens after sunrise in the morning, pure white, with three petals, being not unlike the hollyhock in appearance, though

more delicate. It begins to close at about two o'clock, when a pale-red streak may be seen running up each petal, and at sundown it is wholly closed. The next morning, at about sunrise, it is again open as fresh as ever, but, instead of being white, is now a beautiful pink. It lasts the day out, but with the setting sun again closes,—this time, however, wilting and falling off, leaving at its base a little boll about the size of a small bean.

Cotton is truly a sun plant. Cloudy, rainy, wet weather is, at every stage of its growth, undesirable. Thus we see the blossom opening and shutting with the sun;—a very necessary provision, for if dew or rain falls into it, a gluey substance forms at its base, which makes it stick to the boll, and it all rots together. The whole plant also shows its nature and its longings by turning even its green leaves toward the east in the morning, and following the sun in its course, until they face the west as it sets; and then they droop, as if the day's work were finished, and nothing remained but to rest and await the coming of the sun again. With its long tap-root deep in the ground, it flourishes even when the weather is so dry as to be very harmful to most other vegetation; and after its limbs are grown so that the whole ground is well shaded, it becomes even better able to endure prolonged drought. Yet through the summer, showers are very needful to secure the full fruit-bearing capacity of the plant, that the development of fruit may be rapid and uninterrupted after the blossoms once begin to set. About six weeks are required for the little boll, which we stated was found at the base of the flower when it dropped, to mature and open, ready for picking, the general rule being, during summer and early fall, from square to bloom three weeks, and from bloom to open boll six

weeks. The cotton usually planted (the green seed or short staple) displays in each boll, when it opens, from four to five separate locks of the staple, though some descriptions show from eight to ten. Sea Island (the black seed or long staple) has a much larger stalk, fewer and smaller bolls, with three locks, and a light-yellow blossom, never changing. Of the green-seed cottons there are many kinds, some of them very prolific in the production of bolls, but for good reasons their cultivation has not extended.

The terms of bottom crop, middle crop and top crop are in common use. To some minds they convey the idea of distinct and separate growths. They are, however, only imaginary lines. We may define them pretty accurately by saying that the bottom crop is produced by all the blossoms that come before or about the 20th of July, and if the crop has a good, strong, clean start, this is always a full one; the middle crop is the portion which blooms subsequent to that date and up to about the 1st of September, and is frequently shortened by long-continued drought, and this is especially so in seasons when the stand was grassy and poor; the top crop is the portion that blooms after September 1st, and is often cut off by an early frost or wholly destroyed, with a portion of the middle crop, by the caterpillar. Of a good year's full production, we may call the middle crop one-half the total yield, and the top and bottom crops one-quarter each.

Many are the enemies of the cotton plant during the summer and fall months. First are the lice, which come upon it when it is from twelve to twenty-four inches in height; they cover the plant entirely, and temporarily stop its growth, sometimes killing it, but not often. At a later period is the disease called the rust, or, more properly, the blight. Its nature apparently is not clearly under-

stood, as people account for it in different ways. General Toombs, whom many call the best planter in Georgia, says "*rust means poverty.*" Others claim that a want of moisture and an excess of moisture are both at times its cause. However this may be, its effect is to make the plant drop its leaves, and the fruit withers and dies. Generally the damage done from this cause is not serious—being less than reported under the influence of the fears it excites; yet there have been occasions when the injury was great. Next comes shedding; this is the same thing that always happens to every kind of fruit-bearing tree or plant, when fruit forms in excess of its strength to ripen. Not more than a half to two-thirds of the blooms make cotton. It would be impossible for the plant to mature them all, as a square forms at every joint on every limb. First, many of the buds fall; next, some die while blooming; then the bolls drop at all stages of development. This is a natural and healthful mode of relief for the over-burdened plant. Of course, very frequently the shedding is in excess of the necessities of growth, as, for instance, when a long wet period is followed by an unusually dry time. But the harm done even then, is seldom as serious as imagined, though the occasions when it proves very serious are just frequent enough to make the "scare" always effective.

It is evident from this brief description, that all these disorders would attack much less virulently a vigorous, firmly-rooted plant, than one which, although apparently healthy (for so long as it has moisture enough it may grow luxuriantly), has less vigor because less depth of root. In our previous chapter we have shown that rain and grass in May and June prevented, or at least discouraged, the full growth of the tap root and induced a larger development of surface roots. This is only the common

course of nature. The object of the tap root is to obtain moisture. When the ground is full of it everywhere, there is no need for deeper growth; the causes which necessitate it are not present; hence it does not develop fully. This same habit pervades all vegetable life, and even may be observed in trees grown in swamps, the excessive moisture resulting in great increase of surface roots and very little root lower down. We readily see that such a tree or such a plant never can be strong to resist disease, and especially such diseases as are intensified by the heats and droughts of summer. A study of the seasons and of the trials cotton passes through every year, will, we think, be much simplified if we keep in mind the fact here illustrated.

But of all scourges cotton endures, none equals in destructive force the ravages of the caterpillar. We must not confound this pest with the boll worm. The latter is a small worm that cuts a hole in the boll itself. As one worm, however, is said by some to destroy only one boll, and the worms are never very numerous, they cannot be very injurious. The caterpillar or army-worm, on the other hand, has an appetite which is never satisfied, and destroys every green thing, sweeping through a plantation from one end to the other in an incredibly short space of time, leaving not a leaf, nor a small boll, nor a twig behind. Their first appearance any season, is the very last of June or in the early days of July. When fully grown they are about one-and-a-half inches in length and as large around as an ordinary lead pencil. As soon as hatched they begin to eat and continue to eat until they web up. In a few days the moth is out again, lays her eggs and dies. The successive broods follow one another at intervals of from three to four weeks, and it is only when they have reached the third generation that they are

sufficiently numerous to wholly strip the leaves from the plant. Then they become an army, indeed, and well deserve the name, for they leave absolute desolation behind them, and can be gathered up by the bushel. In case they come in full force as early as the tenth or fifteenth of August, they are very destructive to the crop. When, however, it is not till the first of September that they appear as an army, their power for evil is much shortened, though still great.

Fortunately the caterpillar does not flourish in all kinds of weather. Every year they are to be found in the cotton fields, but they never multiply largely except in rainy seasons. A wet July and August are pretty sure to fill the fields with them. Experience, however, would seem to teach that even caterpillars never make as thorough work when the spring start and stand are perfect. There may be several reasons for this. In the first place the more natural and healthful the early growth is, the more abundant the early crop must be, and, as the caterpillar eats only the leaves and young fruit, in such case there are more bolls matured, and hence more left uneaten. Then again any shrub with a good root may be cut, bruised, eaten off, and yet give it favorable weather and it will send out a strong new growth bearing fruit, while under similar circumstances a less sturdy weed would die. But whatever the reason or reasons may be, the fact remains that a plant well started in the spring never suffers so fatally even from caterpillars' visits, as one that had an unfavorable beginning. They are very destructive always, but fairly extinguish a weak plant.

In this connection it will be of use to remember that a good crop can be made off of fewer bolls to each stalk than many imagine. About three hundred full bolls, such as an average season produces, will turn out a pound of lint.

Hence if on the poor soils there was a plant in every three square feet, and nine well-developed bolls on each plant, the product would be about a bale of cotton to the acre.* Of course, there never is a good plant to every three square feet, so the proposition is defective; but it at least serves to illustrate the possibility of some recovery in a strong plant, if so small an average of fruit produces in the aggregate so much; also it explains why the farmer after telling us, and honestly too, that all was lost by shedding—because he saw so many bolls upon the ground—often wakes up subsequently to find, perhaps hidden away beneath the leaves, bolls enough to surprise even his practiced eye. Before, however, pursuing this thought further, it is necessary to analyze the weather data during the summer and fall of the years covered by our previous inquiry.

1871.

For the last six months of 1871 the monthly record of rainfall and weather is as follows:

RAINFALL.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Charleston .....	.....	.....	.....	4.76	4.09	3.67
Augusta .....	.....	.....	.....	1.62	7.78	4.98
Savannah	3.86	18.01	6.42	3.55	2.22	1.59
Atlanta	1.12	6.49	4.41	2.09	3.40	3.30
Montgomery	1.37	6.00	2.10	0.53	5.80	3.00
Mobile	4.24	2.71	3.95	5.33	6.68	1.36
New Orleans	6.42	8.61	6.98	9.09	7.14	1.46
Shreveport .....	.....	.....	.....	.....	3.04	1.30
Memphis .....	.....	.....	3.38	4.01	2.23	1.62
Nashville .....	.....	.....	.....	1.31	2.13	1.65
Galveston	2.63	4.32	3.66	17.81	5.67	2.40

CHRONICLE WEATHER REPORTS SUMMARY.

July.—During this month the weather everywhere was extremely favorable, except a drought in Texas and an excess of rain at New Orleans; consequently cultivation and growth progressed satisfactorily and crop accounts greatly improved. The rains at New Orleans were confined almost wholly to the immediate coast. From the interior of Texas complaints of drought continued.

August.—Very heavy rains the fourth week of this month (from the 19th to the 26th) at Savannah, Charleston and Wilmington, but did not extend inland; on the contrary, a want of rain was complained of at

*There being 43,560 square feet in an acre, one plant to every three square feet would give 14,520 plants to the acre; 9 bolls to a plant, therefore would make 130,680 bolls; which divided by 300 (the number required to yield one pound), gives the result—435 pounds to the acre.

almost all other points (except in the immediate vicinity of New Orleans), accompanying shedding and rust.

September.—Texas injured very materially by the continued drought. Some counties scarcely any rain from May to the middle of September. Heavy rains along the Gulf and Atlantic coasts, but generally quite local and not extending inland, except in the Atlantic States. The Sea Islands of Georgia and Florida reported greatly injured from the rains and wind of August and September. *Frost*, but not a killing frost, at Memphis and Nashville, September 30.

October.—During the first week of October a very severe storm, beginning in the Gulf and decreasing in violence, passed up the Atlantic; was not felt far inland. The remainder of the month the rainfall was generally small, except in the vicinity of Galveston and New Orleans. Cold weather on the 12th, with slight frost over a large portion of the South; we see it mentioned at Montgomery, Mobile, Columbus, Macon, etc., but everywhere stated to be of no importance.

November.—Slight frost at Galveston Nov. 4. A killing frost and freeze on the nights of the 15th, 16th, 17th and 18th over almost the entire South, entirely destroying vegetation. Snow fell at many points—at Nashville, for instance. Picking generally finished before the close of the month, except in Memphis district and in the neighboring sections.

December.—Fall of snow at Memphis, ten inches deep, on the last day of November. On the 7th and 8th killing frost in Northern and Middle Texas, and very cold all over South; for the week ending December 8, average thermometer at Memphis 31. Last half of month weather much more favorable and less severe.

FROM THE AGRICULTURAL BUREAU REPORTS.

From the August and September reports, issued as one: "There are reports of injuries by the boll-worm and caterpillar, mainly in Mississippi and Louisiana, but no evidence that a general or very serious loss from insects is probable. Rust is common in the Atlantic States and, to some extent, on the Gulf coast. Drought has been injurious in the Carolinas and in Texas, though the reports of rainfall through the South indicate a fair supply of moisture, the distribution of which has been somewhat more unequal than usual."

From the October report: "The cotton returns are no more favorable than those of the preceding month. * * * The injuries reported are from rust, shedding of bolls prematurely, sufficiently low temperature to check the development of bolls in more northern latitudes, floods and inundation in Florida and Georgia, sprouting or rotting of bolls from rains, drought in some sections of Georgia, and the boll and army worms in portions of Mississippi and more western States. It does not appear that the losses from insects are general or very serious, with a few isolated exceptions. Drought should be credited with a larger proportion of the depreciation than any other assigned cause, notwithstanding the fact that cotton endures lack of moisture better than any other crop."

From the November and December reports, issued as one: "The November returns relative to the condition and yield of the cotton crop indicated a larger product than was expected in October, promising fully to make good the moderate expectations of July and August. There were no killing frosts up to the date of these reports. * * * The cotton returns received in December are similar in tenor to the November reports, fully sustaining the moderate promise of improvement upon the somewhat gloomy views in October. Yet the change in condition is not so marked as to modify materially the prospect foreshadowed in the monthly reports for July and September,

"except that the growing season has been from seven to ten days longer than the average of seasons, increasing the crop prospect at least 200,000 bales."

From the foregoing we learn—

First.—That July was generally very favorable; that August was also favorable, except—(1) a severe storm along the Atlantic coast, not extending far inland; (2) a severe drought in Texas; and (3) severe shedding and rust almost everywhere, the latter the result of too little rain, although the records show that there was no want of rain, and the Agricultural Bureau says, "the reports of rainfall through the South indicate a fair supply of moisture."

Second.—That the picking season was entirely satisfactory.

Third.—That the short crop of this year can therefore only be accounted for by the fact that the stand was defective, grassy and sickly, and, as a consequence, poorly rooted; so that when the ordinary summer weather came, although the plant looked well, it succumbed and dropped its fruit under conditions of weather which to a vigorous plant would have been satisfactory.

1872.

The weather record, rainfall, &c., were as follows for the last six months of 1872:

1872.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Wilmington...Rainfall...	5.54	11.15	8.22	2.83	3.37	4.10
" Av. therm.	83.6	80.8	75.7	62.4	51.7	41.5
Charleston...Rainfall...	2.30	7.81	7.88	4.21	3.40	2.46
" Av. therm.	81.1	81.8	77.8	64.8	53.8	45.8
Augusta...Rainfall...	6.87	4.10	1.33	1.36	3.90	3.48
" Av. therm.	81.0	80.0	75.0	62.0	48.9	41.7
Atlanta...Rainfall...	3.91	5.84	2.26	0.74	2.12	4.48
" Av. therm.	...	...	...	...	...	...
Savannah...Rainfall...	4.36	12.31	3.52	3.85	2.43	2.29
" Av. therm.	83.0	84.0	76.0	64.0	54.0	46.5
Montgomery...Rainfall...	10.50	2.30	3.65	0.53	5.73	4.08
" Av. therm.	...	...	...	63.3	50.2	45.5
Mobile...Rainfall...	13.37	1.69	2.15	2.77	5.65	3.70
" Av. therm.	80.7	81.2	77.6	65.6	54.0	47.9
New Orleans...Rainfall...	6.43	3.75	2.10	3.18	7.43	5.25
" Av. therm.	82.1	82.6	79.3	68.4	57.4	51.4
Vicksburg...Rainfall...	2.11	0.49	0.72	1.74	1.85	10.41
" Av. therm.	83.5	81.6	79.7	65.1	51.3	45.0
Shreveport...Rainfall...	1.62	0.40	2.91	3.41	1.39	7.03
" Av. therm.	81.0	81.5	78.6	65.5	50.0	42.0

"endure the draughts upon vitality consequent upon the maturing of
 "their heavy burden of bolls, causing bolls to drop and young bolls to
 "wither. In exposed bottom lands where sudden and heavy rains
 "occurred, damage by flooding resulted. While a few reports allude to
 "the presence of insects injurious to cotton, losses from that cause, in
 "all the States east and north of Alabama, are less than usual. Local
 "droughts of considerable severity have prevailed for several weeks in
 "portions of the territory west of Alabama, while a sufficiency of
 "moisture has been reported of the Atlantic States, and in many places
 "an excess of rain is observed. * * * * * Thus the prospect
 "throughout the entire cotton area, which favored (August 1) a yield 5
 "per cent larger than an average product, promises at the present time
 "(September 1) 9 per cent less than an average."

October report: "The weather has been generally favorable for
 "picking. No violent storms are reported, and drought has not pre-
 "vailed. * * * The devastations of the caterpillar have extended
 "farther north, even into North Carolina, and have involved the top
 "crop partially and in many places wholly. The influence of drought
 "in the later summer months has been cumulative in its effects, and
 "exhausted vitality is more apparent than in September; yet there are
 "districts which report exemption from this premature decay, and
 "promise enhanced results."

November and December reports in one.—"The present may be classed
 "with the unpropitious seasons for cotton production, but it is not a
 "more unfavorable year than the preceding one. It has been pro-
 "ductive of somewhat less than average results, not from the failure
 "of the stand of plants nor from excessive cold and moisture in the
 "spring, * * * but from the wide prevalence of insect depredations
 "and from local droughts of more or less severity. * * * The weather
 "has been fine for picking."

From the foregoing we learn—

First.—That July and August were much more rainy
 in certain districts than July of the previous year, and
 that the drought of August, 1872, was more severe over
 a large section than the drought of August, 1871, the
 rainfall at Vicksburg for August, 1872, being only forty-
 nine hundredths of an inch, at Shreveport forty hun-
 dredths, at Memphis fifty-four hundredths.

Second.—That caterpillars did more harm in 1872 than
 in 1871, and the fall seasons were not very dissimilar
 being fairly favorable in both cases.

Third.—Under these circumstances can we account for
 the difference in yield the two years—being on 9.75 per
 cent increased acreage, 32.13 per cent increased crop—
 except from the fact established in the last chapter, that
 the stand in 1872 was very good, strong, clean and well

December.—A fairly favorable month for picking. Generally speaking, but little rain fell, though there were many cold days.

FROM THE AGRICULTURAL BUREAU REPORTS.

Report for August-September: "The present season can scarcely be deemed quite an average one for cotton; but when we recall the fact that drought, severe rains, wind-storms, insects, rust—all these, or most of them—are recorded of every crop that is made, it will be seen that seasons worse than the present are almost as numerous as those that are better. Should the autumn prove unusually favorable, an average yield might yet be obtained. The only drawbacks are rains and worms—the former no more destructive than severe droughts of some former years, the latter less so than in some former visitations. While caterpillars have been more abundant than last year, their ravages have been really disastrous or sweeping in few locations."

From October report: "The average condition of cotton in the first week of October, as compared with October reports of 1871 and 1872, stands as much higher than that of the former as it falls below the records of the latter. * * * * The average this year has fallen off * * * to 78½. * * * The general average in October, 1871, was 76; it was 82 in October last year. * * * * The season must be of average length and comparatively favorable for picking to ensure a crop equal to that of last year."

From November and December report: "The weather has been generally favorable for cotton picking during the past month, as well as for ripening of the later bolls. Some of the reports are exceptionally favorable. In the more northern portion of the cotton belt, fields that were planted late were caught by the frost, but the area thus injured has nowhere been large." After some other remarks and a detailed estimate by States, the Bureau continues: "This aggregate, with the small quantity grown outside of the limits of the cotton States, will make the total estimate of the November returns as nearly as possible 3,700,000 bales."

From the foregoing we learn—

First.—That the weather during the months of July and August, 1873, was every way about as favorable to the development of the crop as the weather during the same two months of 1872. To compare the rainfall for the two seasons, we bring together the following data:

Monthly Rainfall at—	1872.			1873.		
	July.	August.	Total.	July.	August.	Total.
Wilmington	5.54	11.15	16.69	4.93	7.42	12.35
Charleston	2.30	7.81	10.11	6.97	12.91	19.91
Augusta	6.87	4.10	10.97	3.34	5.36	8.70
Atlanta	3.91	5.84	9.75	3.87	2.08	5.95
Savannah	4.36	12.31	16.67	5.44	5.45	10.89
Montgomery	10.50	2.30	12.80	4.17	2.56	6.73
Mobile	13.37	1.69	15.06	8.75	10.35	19.10
New Orleans	6.43	3.75	10.18	6.27	8.30	14.57
Vicksburg	2.11	0.49	2.60	2.86	3.67	6.53
Shreveport	1.62	0.40	2.02	3.31	1.59	4.90
Memphis	4.23	0.54	4.77	0.82	4.53	5.35
Nashville	4.90	1.45	6.35	4.63	2.36	6.99
Galveston	0.34	2.63	2.97	6.83	8.01	14.87
Indianola	1.49	2.84	4.33	3.49	5.00	8.49

From this statement we see that rain was in some sections in excess of the needs of the plant both seasons, but that where it was in excess, except on the very coast of South Carolina, Alabama, Louisiana and Texas, less rain fell in the two months of 1873 than in the same two months of 1872. Rain was not in excess either year at Vicksburg, Shreveport, Memphis and Nashville. So that, in this particular, 1873 was as favored as 1872. Caterpillars were more widely reported in 1873 than in 1872, but the main injury they did was confined to about the same sections the two seasons, and the loss to the two crops from this cause would not differ materially.

Second.—There was no excessively dry weather anywhere during any portion of the summer months, except at Memphis in July; thus the sections where the plant started weak, grassy, and short rooted, had sufficient moisture all summer; and hence the most that could be obtained from a defective stand was obtained from it. With a grassy start or stand, a very dry summer is, for the reasons already stated, especially disastrous.

Third.—Do not these facts with regard to the planting season and summer growth point to a yield very similar to the result reached? In about one-third of the South the stand in June was grassy and poor, but even that portion was well cleaned and cultivated the first three weeks of July. Elsewhere the season was fairly favorable, except in the limited districts—mainly in Georgia and Alabama—which the caterpillars injured; while the portion where the stand was poor, having, as stated, been well cleaned and improved in July, probably went through the remainder of the summer better than it would have done had it been a dry season. Consequently, although there was an increased acreage planted in the richest cotton sections of 10.59 per cent, there was an increase in the

crop of only 6.09 per cent. Had the stand been everywhere perfect, we could have looked for a much larger increase in the crop.

1871.

The temperature, rainfall, number of days of rain and weather summary for the last six months of 1874 were as follows :

1874.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Norfolk... Rainfall, inch.	8.81	5.04	3.78	0.04	3.39	4.58
" No. days rain.	15	14	9	4	11	12
" Ther... { High	96.0	96.5	87.0	80.0	74.0	73.0
" Ther... { Low	62.0	58.0	54.0	41.0	31.0	24.0
" Ther... { Aver	76.9	73.2	70.4	50.8	50.5	43.9
Wilmington. Rainfall, inch.	5.81	4.04	9.35	3.38	0.91	2.67
" No. days rain.	15	12	6	5	5	13
" Ther... { High	92.0	94.0	94.0	82.0	76.0	78.0
" Ther... { Low	64.0	56.0	55.0	40.0	33.0	28.0
" Ther... { Aver	79.1	70.7	74.1	63.8	56.6	49.4
Charleston. Rainfall, inch.	13.74	7.06	6.66	1.85	2.11	2.94
" No. days rain.	17	10	10	5	7	8
" Ther... { High	92.0	92.0	87.0	81.0	78.0	73.0
" Ther... { Low	64.0	58.0	57.0	44.0	37.0	33.0
" Ther... { Aver	79.3	79.1	75.8	66.7	58.8	53.1
Augusta... Rainfall, inch.	5.35	6.81	5.85	1.09	2.21	4.04
" No. days rain.	13	10	9	6	10	11
" Ther... { High	97.0	101.0	92.0	86.0	74.0	77.0
" Ther... { Low	68.0	61.0	55.0	40.0	30.0	24.0
" Ther... { Aver	78.5	78.8	74.7	63.5	56.7	49.4
Atlanta... Rainfall, inch.	4.70	10.00	0.47	0.80	3.19	3.00
" No. days rain.	9	9	5	3	9	11
" Ther... { High	90.0	98.0	87.0	81.0	74.0	62.0
" Ther... { Low	64.0	66.0	55.0	40.0	28.0	29.0
" Ther... { Aver	85.0	85.0	78.0	70.0	60.0	50.0
Savannah. Rainfall, inch.	10.14	6.58	8.89	1.42	1.80	1.65
" No. days rain.	16	14	14	5	9	11
" Ther... { High	94.0	96.0	90.0	80.0	81.0	76.0
" Ther... { Low	68.0	65.0	57.0	42.0	37.0	37.0
" Ther... { Aver	79.0	79.0	75.3	66.3	59.6	54.6
Columbus. Rainfall, inch.	6.45	3.82	1.37	3.02	6.01	6.92
" No. days rain.	10	9	5	6	4	16
" Ther... { High	...	...	...	...	...	...
" Ther... { Low	...	...	...	...	...	...
" Ther... { Aver	83.0	83.0	78.0	67.0	59.0	50.0
Macon..... Rainfall, inch.	5.68	5.23	5.27	1.42	2.03	4.09
" No. days rain.	...	...	...	...	...	...
" Ther... { High	94.0	97.0	87.0	81.0	79.0	74.0
" Ther... { Low	70.0	70.0	62.0	40.0	26.0	26.0
" Ther... { Aver	86.0	87.0	81.0	72.0	66.0	58.0
Montgomery. Rainfall, inch.	3.87	1.25	0.30	1.97	2.60	5.14
" No. days rain.	10	10	10	2	8	15
" Ther... { High	93.0	103.0	90.0	88.0	80.5	79.0
" Ther... { Low	68.0	69.5	53.0	40.0	31.0	32.0
" Ther... { Aver	79.0	72.6	76.2	65.1	58.2	51.7
Mobile Rainfall, inch.	10.21	3.79	2.54	0.00	2.04	4.17
" No. days rain.	10	8	10	0	7	14
" Ther... { High	96.0	100.0	91.0	86.0	9.0	71.0
" Ther... { Low	69.0	71.0	54.0	44.0	32.0	34.0
" Ther... { Aver	80.8	83.3	77.9	67.4	60.2	54.3
N. Orleans. Rainfall, inch.	12.93	4.82	4.21	0.00	1.12	3.27
" No. days rain.	17	13	18	*	10	14
" Ther... { High	93.0	96.0	88.0	85.0	81.0	76.0
" Ther... { Low	72.0	74.0	63.0	52.0	40.5	41.0
" Ther... { Aver	81.4	83.9	78.9	70.4	66.3	58.8
Shreveport. Rainfall, inch.	5.59	0.19	6.33	0.10	2.10	6.95
" No. days rain.	11	6	11	1	6	15
" Ther... { High	94.0	100.0	94.0	87.0	84.0	77.0
" Ther... { Low	66.0	72.0	56.0	39.0	31.0	33.0
" Ther... { Aver	82.0	86.0	75.0	66.0	59.0	53.0
Columbus, Miss.—						
" Rainfall, inch.	....	....	....	....	1.80	2.76
" No. days rain.	....	....	....	....	4	6

* Two slight sprinkles.

1874.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Fayette, Miss.—						
“ Rainfall, inch.	7.60	1.50	7.20	0.20	3.30	5.00
“ No. days rain.	10	4	11	2	7	7
“ Ther... { High	92.0	101.0	93.0	84.0	80.0	74.0
“ { Low	68.0	71.0	51.0	40.0	30.0	3.0
“ { Aver.	77.2	81.2	71.3	63.1	54.1	51.7
Vicksburg. Rainfall, inch.	7.39	0.06	6.20	0.00	3.21	4.75
“ No. days rain.	11	4	10	2	6	10
“ Ther... { High.	96.5	98.0	93.0	86.0	81.0	78.0
“ { Low.	66.0	70.0	53.0	39.0	30.0	33.0
“ { Aver.	81.1	84.6	77.0	64.7	58.6	53.3
Nashville. Rainfall, inch.	2.65	3.52	3.12	2.63	6.12	4.19
“ No. days rain.	8	6	7	5	9	12
“ Ther... { High.	101.0	106.0	91.0	80.0	77.0	75.0
“ { Low.	62.0	66.0	49.0	34.0	24.0	27.0
“ { Aver.	83.4	81.5	73.4	59.8	49.8	44.0
Memphis... Rainfall, inch.	0.47	4.60	4.72	1.07	3.67	2.94
“ No. days rain.	5	5	8	2	12	3
“ Ther... { High.	97.5	101.5	90.0	82.0	80.0	72.0
“ { Low.	66.0	69.0	52.5	34.0	25.0	27.0
“ { Aver.	82.8	82.9	73.2	60.3	52.0	45.6
Galveston. Rainfall, inch.	9.30	7.19	5.84	0.12	1.58	6.92
“ No. days rain.	14	7	15	2	9	18
“ Ther... { High	96.0	98.5	91.0	83.0	81.0	72.0
“ { Low.	72.0	73.0	65.0	54.0	42.0	39.0
“ { Ave.	82.5	84.4	79.5	71.8	65.1	59.5
Indianola. Rainfall, inch.	5.76	1.25	12.89	0.62	2.56	4.86
“ No. days rain.	8	3	15	2	7	6
“ Ther... { High.	97.5	100.0	89.5	86.0	83.5	77.0
“ { Low.	71.0	73.0	65.0	51.0	38.0	40.0
“ { Aver.	82.3	84.3	79.2	73.2	69.4	59.1
Corsicana. Rainfall, inch.	....	....	....	0.07	2.94	9.52
“ No. days rain.	....	....	....	3	9	15
“ Ther... { High.	....	....	....	87.0	83.0	75.0
“ { Low	....	....	....	31.0	30.0	32.0
“ { Aver.	....	....	....	67.3	58.2	51.1

CHRONICLE WEATHER REPORTS SUMMARY.

July.—During this month there were heavy rains on the Atlantic and Gulf coasts, among them a very severe storm reported at Savannah, doing much injury to buildings, but not reaching far inland except in a much modified form. A drought also began in the Memphis district the first of July, the rainfall there being only forty-seven hundredths of an inch during the month. Neither of these causes had, however, acted to any considerable extent injuriously to cotton up to August 1. At that date the crop may be described as developing very satisfactorily almost everywhere.

August.—Towards the latter half of July the district where dry weather prevailed extended beyond the Memphis district, taking in, first, Nashville, then Vicksburg, Shreveport, Dallas, &c.,—in a word, covering (through the whole or the first three weeks of August) all of Tennessee and Arkansas, and the northern portions of Louisiana, Alabama, Mississippi and Texas, being in great part the very section where the May drought prevailed most severely. In portions of that large section very considerable harm was done by shedding, and done in some cases in a wonderfully short space of time. The rain recorded in our table, at Memphis and Nashville, for August fell during the last week of the month, too late to prevent injury. The Atlantic States had some very heavy showers all through the month, but no special harm resulted to cotton from them.

September.—Rains returned early in September through all the dry district, doing good in some sections, especially in case of a late frost; but in others the plant was beyond redemption. The weather, however, was everywhere fairly favorable.

October.—This month was as perfect as possible for gathering in the crop. But in the dry section, where expectations were being built upon a second growth, and in the Mississippi Valley, where the plant was so

very late on account of the flood, an early frost did great harm. At Memphis and Nashville there was a killing frost October 13th and 14th, and from October 29th to November 1st a killing frost is recorded in all the remainder of the district referred to.

November.—Weather continued generally very favorable for picking.

December.—Month favorable for picking, but very little cotton anywhere left to pick.

FROM THE AGRICULTURAL BUREAU REPORTS.

The August and September report, issued as one, says: "Our September returns indicate a heavy decline in the prospects of the cotton crop in all of the States except Virginia. * * * In North Carolina the leading complaint in several counties on the coast and in the northern part of the State is cold nights, * * in some cases accompanied by late rains, producing rust. * * * In several counties in the interior a damaging drought set in about the middle of August, which caused copious shedding of forms. * * * The same general conditions are apparent in South Carolina. * * * In Georgia * * protracted drought is the leading cause of this decline, but in many counties it was accompanied by extreme heat and hot, blasting winds. In Dooley county some promising fields were parched within half an hour. * * * In Florida, * * * in some counties, as Levy, alternate flood and drought ruined the crops on the best lands, causing great discouragement among farmers and a desire to emigrate. * * * In Alabama, though the injurious causes have been operative, the general decline * * has been smaller than in any other great cotton State. * * * Mississippi. * * The general cause of injury here was drought, which manifested itself more destructively upon upland than upon bottom crops. * * * In Louisiana * * * the drought appears to grow in virulence toward the southwest. The intense heat and blasting, hot winds are more frequently noted. * * * Texas, * * The untoward influences that had affected the crop in the other Gulf States here found their culmination. In some counties no rain had fallen since May. * * * In Arkansas and Tennessee the drought of August combined with that of the earlier season previously reported; in several localities no rain has fallen since April, and in some of these the injury was aggravated by hot winds."

The October report says: "Our October returns show a slight improvement in the condition. * * * North Carolina, South Carolina and Alabama showed a decline; Mississippi and Louisiana remained stationary; Georgia, Florida, Texas, Arkansas and Tennessee raised their averages."

The November and December report, issued as one, says: * * "The weather for ripening and gathering the top crop has been very favorable. The reports are nearly unanimous in stating that the proportion of lint to seed is large."

From the foregoing we conclude—

First.—That July was fairly favorable almost everywhere, so that on the first of August the plants, take the country as a whole, were in excellent condition. This does not mean that cotton in the Valley of the Mississippi and its tributaries (the overflowed districts) was well advanced, for much of it was a month late; nor does it

mean that the very defective stands and poorly developed roots by reason of the May drought, had been repaired; they looked as if they were repaired, because the plants had grown so large and luxuriantly under the abundant June and early July rains as to conceal such defects. Two harmful agencies, however, rain and drought, had in this month in different sections begun to excite fears; the first did not do the harm anticipated, mainly because the fields were unusually clean when the rains began; the second developed disastrously in succeeding weeks.

Second.—During August the drought continued, and the heat, in portions of the dry zone, became excessive. The former point we have remarked upon above in detail; to illustrate the latter, we give the following table, showing the variations in the thermometer for August for four years:

THERMOMETER FOR AUGUST.

Stations.	1874.	1875.	1876.	1877.	Stations.	1874.	1875.	1876.	1877.
Norfolk.					N. Orleans.				
Highest..	96.5	93.0	96.5	94.0	Highest..	96.0	95.0	97.0	96.0
Lowest..	58.0	66.0	63.0	66.0	Lowest..	72.0	70.0	69.0	66.0
Average.	73.2	76.1	78.2	77.1	Average.	83.9	79.3	82.2	83.1
Wilmington.					Shreveport.				
Highest..	91.0	92.0	.....	.....	Highest..	100.0	104.0	96.0	99.0
Lowest..	56.0	65.0	.....	.....	Lowest..	72.0	61.0	69.0	65.0
Average.	76.7	76.6	78.3	78.5	Average.	86.0	75.0	83.0	82.0
Charleston.					Fayette.				
Highest..	92.0	91.0	97.0	93.0	Highest..	101.0	99.0	91.0	88.0
Lowest..	48.0	67.0	72.0	71.0	Lowest..	71.0	63.0	70.0	53.0
Average.	79.1	79.9	82.4	82.3	Average.	81.2	74.1	77.2	72.1
Augusta.					Vicksburg.				
Highest..	101.0	91.0	97.0	100.0	Highest..	98.0	92.0	97.0	99.0
Lowest..	61.0	63.0	70.0	65.0	Lowest..	70.0	65.0	67.5	66.0
Average.	78.8	76.2	81.6	80.8	Average.	84.6	78.3	80.2	81.1
Atlanta.					Nashville.				
Highest..	98.0	90.0	95.0	98.0	Highest..	106.0	89.0	99.0	91.0
Lowest..	66.0	66.0	72.0	67.0	Lowest..	66.0	57.0	64.0	62.0
Average.	85.0	82.0	90.0	87.0	Average.	81.5	74.0	78.7	77.4
Savannah.					Memphis.				
Highest..	96.0	91.0	97.0	100.0	Highest..	101.5	91.0	95.0	91.0
Lowest..	65.0	65.0	70.0	71.0	Lowest..	66.0	63.0	65.0	62.0
Average.	79.0	78.4	82.1	81.6	Average.	82.9	75.0	79.1	78.0
Columbus.					Galveston.				
Highest..	.....	90.0	96.0	95.0	Highest..	98.5	96.0	91.0	97.0
Lowest..	.....	61.0	70.0	73.0	Lowest..	73.0	71.0	71.0	70.0
Average.	83.0	79.0	82.0	82.0	Average.	84.1	82.9	83.7	84.6
Montgomery.					Indianola.				
Highest..	103.0	91.0	95.0	99.0	Highest..	100.0	97.0	99.0	100.0
Lowest..	69.5	65.0	68.5	66.5	Lowest..	73.0	71.0	71.0	73.0
Average.	82.6	78.6	80.9	81.8	Average.	81.3	83.2	83.4	85.6
Mobile.					Corsicana.				
Highest..	100.0	91.0	95.0	100.0	Highest..	.....	101.0	101.0	103.0
Lowest..	71.0	68.0	71.0	70.0	Lowest..	.....	64.0	68.0	61.0
Average.	83.3	78.4	80.1	82.0	Average.	.....	80.2	82.7	81.8

This statement discloses what was meant by the "hot winds" so frequently spoken of at that time in connection with the drought, and added to the want of moisture, indicates the extent of the trial to which the crop was subjected in August, 1874. But the reader will be surprised perhaps to see that it by no means struck all points injured by it with this extreme of severity; and judging from other dry seasons, it ought not to have done the extensive harm it did, had the plant been well rooted and started in the spring. In fact, if we leave out a few points, it has been much hotter other years when the crop was an excellent one; compare, for instance, with 1876. Besides, even at Memphis the average in 1874 was only 82.9. This is not a high average for cotton.

Third.—Early frost prevented the maturing of the later growth in the Valley of the Mississippi and its tributaries (the overflowed district) which was planted so late. An early frost was especially harmful in 1874 in that district.

Fourth.—These facts furnish, we think, a full explanation of the short yield. 1. The stand was over a considerable section very imperfect, irregular and short rooted on account of the excessive and constant rains in April, and the extreme drought in May. 2. The plantings in all the overflowed district were very late, and the frost in the fall was very early, so that the plant in those rich sections did not have time to mature the later growth. 3. The excessive heat and drought together did great harm, but their power for harm was greatly enhanced, because in nearly all that section the plant rooted poorly in the spring.

1875.

The weather summary, including temperature, rainfall and number of days on which it rained, is as follows for the last six months of 1875 :

1875.		July.	Aug.	Sept.	Oct.	Nov.	Dec.
Norfolk....	Rainfall, inch.	4.72	10.37	2.05	3.21	3.64	3.11
"	No. days rain.	13	23	10	9	12	14
" Ther...	{ High	101.5	93.0	92.0	81.0	70.5	73.1
	{ Low	67.0	63.0	50.5	38.0	27.0	17.0
	{ Aver	81.2	78.1	68.7	58.3	49.0	49.3
Wilmington.	Rainfall, inch.	1.95	7.44	2.23	2.53	1.77	3.20
"	No. days rain.	10	15	10	9	8	8
" Ther...	{ High	102.0	92.0	95.0	83.0	79.0	77.0
	{ Low	68.0	65.0	50.0	36.0	28.0	18.0
	{ Aver	81.9	76.6	71.5	60.0	55.5	51.8
Charleston.	Rainfall, inch.	1.05	1.91	4.13	3.90	3.33	1.92
"	No. days rain.	5	12	10	9	15	14
" Ther...	{ High	98.0	91.0	92.0	87.0	79.0	74.0
	{ Low	75.0	67.0	57.0	44.0	38.0	25.0
	{ Aver	84.6	79.9	75.1	63.3	58.7	54.1
Augusta....	Rainfall, inch.	2.35	5.11	3.12	1.06	3.33	3.55
"	No. days rain.	12	16	11	8	12	13
" Ther...	{ High	100.0	97.0	97.0	81.0	81.0	77.0
	{ Low	71.0	63.0	52.0	34.0	33.0	21.0
	{ Aver	84.6	76.2	73.4	60.0	54.6	52.1
Atlanta....	Rainfall, inch.	3.84	3.42	4.61	1.50	3.15	6.14
"	No. days rain.	8	7	6	5	7	11
" Ther...	{ High	95.0	90.0	93.0	78.0	72.0	71.0
	{ Low	75.0	65.0	57.0	38.0	29.0	12.0
	{ Aver	90.0	82.0	74.0	66.0	59.0	55.0
Savannah..	Rainfall, inch.	1.51	6.11	3.95	2.87	1.49	1.41
"	No. days rain.	3	13	7	4	9	8
" Ther...	{ High	102.0	94.0	95.0	85.0	82.0	80.0
	{ Low	72.0	65.0	55.0	43.0	34.0	25.0
	{ Aver	84.7	78.4	74.7	63.5	60.9	56.0
Columbus..	Rainfall, inch.	1.65	5.95	7.25	2.64	4.52	3.83
"	No. days rain.	5	4	7	7	10	8
" Ther...	{ High	98.0	97.0	94.0	82.0	73.0	74.0
	{ Low	78.0	64.0	54.0	40.0	33.0	22.0
	{ Aver	85.0	77.0	75.0	61.0	57.0	54.0
Macon.....	Rainfall, inch.	1.61	7.18	3.94	0.67	4.48	1.63
"	No. days rain.	7	11	12	7	11	7
" Ther...	{ High	98.0	93.0	92.0	77.0	74.0	77.0
	{ Low	74.0	63.0	57.0	33.0	33.0	18.0
	{ Aver	93.0	83.0	79.0	68.0	64.0	60.0
Montgomery.	Rainfall, inch.	0.99	2.14	8.13	1.68	5.90	6.04
"	No. days rain.	9	10	12	8	16	15
" Ther...	{ High	102.0	94.0	97.0	78.0	79.0	75.0
	{ Low	72.5	65.0	53.0	40.0	33.0	23.0
	{ Aver	83.1	78.6	74.7	60.8	59.3	54.8
Mobile.....	Rainfall, inch.	4.00	7.07	8.52	2.32	5.06	3.01
"	No. days rain.	8	14	12	4	8	10
" Ther...	{ High	99.0	91.0	94.0	82.0	80.0	75.0
	{ Low	73.1	63.0	57.0	44.0	41.0	34.0
	{ Aver	83.9	78.4	75.1	62.7	62.6	57.6
N. Orleans.	Rainfall, inch.	6.57	8.61	7.81	2.09	6.73	5.15
"	No. days rain.	21	21	14	7	14	13
" Ther...	{ High	92.5	90.0	92.0	82.0	80.5	73.0
	{ Low	73.0	70.0	61.0	51.0	48.0	33.0
	{ Aver	81.8	79.3	75.6	67.3	65.6	61.5
Shreveport.	Rainfall, inch.	2.16	6.17	8.02	4.10	2.99	9.54
"	No. days rain.	16	15	4	9	12	13
" Ther...	{ High	107.0	104.0	99.0	85.0	84.0	79.0
	{ Low	71.0	64.0	59.0	44.0	32.0	29.0
	{ Aver	85.0	79.0	73.0	63.0	58.0	55.0
Fayette, Miss.—	Rainfall, inch.	1.10	7.90	7.30	4.10	5.90	4.20
"	No. days rain.	5	11	6	6	7	10
" Ther...	{ High	94.0	90.0	90.0	80.0	80.0	73.0
	{ Low	71.0	63.0	52.0	41.0	34.0	25.0
	{ Aver	79.8	74.1	70.5	58.3	58.1	53.2
Vicksburg..	Rainfall, inch.	1.92	8.85	7.55	3.76	4.55	5.61
"	No. days rain.	6	12	6	8	11	13
" Ther...	{ High	93.0	92.0	94.0	83.0	81.0	79.0
	{ Low	68.5	65.0	50.0	34.5	32.0	25.0
	{ Aver	80.6	78.3	73.4	62.0	59.7	56.8
Columbus, Miss.—	Rainfall, inch.	1.53	5.82	8.17	0.95	6.19	8.32
"	No. days rain.	6	9	6	4	10	13
Little Rock.	Rainfall, inch.	.....	.....	.....	.....	.....	4.50
Nashville...	Rainfall, inch.	8.49	1.86	2.80	3.06	3.92	4.55
"	No. days rain.	16	10	5	7	16	11
" Ther...	{ High	97.0	89.0	83.0	80.0	75.0	73.0
	{ Low	64.0	57.0	41.0	32.0	24.0	12.0
	{ Aver	81.3	74.0	62.0	54.4	51.4	49.2

1875.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Memphis..Rainfall,inch.	4.34	2.39	2.94	2.38	9.60	5.54
"No. days rain.	12	8	3	5	5	11
"Ther...{H gh.	99.0	91.0	93.0	79.9	76.0	74.0
"{Low.	70.0	63.0	44.0	35.0	27.0	21.0
"{Aver.	82.2	75.0	70.0	59.1	59.9	49.8
Galveston..Rainfall,inch.	1.11	6.15	18.41	1.79	5.61	9.71
"No. days rain.	10	11	10	6	12	13
"Ther...{H gh.	97.0	96.0	94.0	84.0	82.0	73.0
"{Low.	77.0	71.0	59.0	56.0	47.0	40.0
"{Aver.	85.0	82.9	74.7	70.6	65.7	61.6
Indianola..Rainfall,inch.	2.34	2.03	10.65	2.26	2.12	6.96
"No. days rain.	9	5	10	4	8	8
"Ther...{H gh.	96.0	97.0	95.0	8.0	83.0	77.0
"{Low.	71.0	71.0	61.0	56.0	40.0	40.0
"{Aver.	84.1	83.2	76.9	71.8	65.0	62.0
Corsicana..Rainfall,inch.	3.05	6.84	1.61	0.22	3.06	6.28
"No. days rain.	3	8	7	5	7	8
"Ther...{H gh.	104.0	101.0	10.0	91.0	88.0	76.0
"{Low.	71.0	64.0	46.0	41.0	26.0	30.0
"{Aver.	85.0	80.2	73.5	63.9	55.6	54.2
Dallas.....Rainfall,inch.	....	....	....	....	....	5.10

CHRONICLE WEATHER REPORTS SUMMARY.

July.—The weather during July was, in general, fairly favorable, splendid showers visiting most sections of the South. In parts of almost all the States, however, there were complaints of drought, while at Memphis and Nashville there was too much rain; but no considerable damage was done from either cause. As the month closed, fears were entertained of damage from the overflow of the Mississippi.

August.—Though some sections continued to complain of drought, the more general difficulty and complaint during August was excessive rain. Shedding, rust, rot, mildew, and overgrowth of weed, were the principal evils existing and feared. The Mississippi overflowed its banks at Memphis and in that vicinity, but although great harm was anticipated and considerable harm was done to individuals, yet the aggregate loss was so limited that its effect on the total crop was not very material.

September.—The first half of September less rain fell, and during the greater portion of that time there was a decided improvement in the weather. But on the 16th a terrific cyclone struck Texas, lasting four days, almost destroying Indianola and doing great harm at Galveston and in all the Texas coast counties; the rainfall at Galveston, during the storm, reached ten and fifty-three hundredths inches, at Shreveport seven and fifty-nine hundredths inches in thirty-eight hours, and at Vicksburg, during two days, five and sixty-one hundredths inches. The crop in all the section of which these cities are the centre, suffered more or less injury from the storm, but the harm done in the coast counties of Texas (say from San Marcos river to the Sabine river, and from the Gulf to a line drawn through Austin, Crockett, and San Augustine) was especially severe and so reported. On the 25th of September there was another storm at Galveston and vicinity, at which six and sixty-three hundredths inches of rain fell, which did further damage to the cotton prostrated by the cyclone. Through Alabama, also, and parts of Georgia, there were excessive rains this month, and much damage reported.

October.—This month was generally favorable for picking the crop. There were, however, light frosts at several points, and killing frost in North Carolina and at Memphis and Nashville.

November.—Considerable rain fell in November, except on the Atlantic coast, and many complaints on that ground were made, especially in the Mississippi Valley and the Gulf States, as the rain beat out the cotton, rotted the bolls, and interfered with the picking. Sickness in

the same section also interfered with picking, while the election excitement in Mississippi had the same effect.

December.—The rains of last month were continued during December and in much the same districts; the weather also turned quite cold almost everywhere. Picking, therefore, made comparatively slow progress. For instance, it rained during November and December on 21 days at Vicksburg, 25 days at Shreveport, 31 days at Montgomery, 27 days at New Orleans, &c. See table above for details.

FROM THE AGRICULTURAL BUREAU REPORTS.

From the August and September reports (to September 1) issued as one:—"The prevalent droughts of July were succeeded by rains in August, too copious for the best results in the Mississippi Valley, and quite injurious in heavy soils of the eastern belt, causing rust, shedding of leaves and fruit forms, and, to some extent, rotting of the lower bolls. There is a rank recent growth which will yield largely with a favorable and long autumn season, or prove a disappointment in case of an early killing frost. In some parts of Texas drought continued for nine weeks, but the seasonable rains since the middle of August have placed the fields in high condition in all except the most severely parched localities."

From the October report (to October 1):—"An improvement in the condition of cotton during the past month is indicated in Alabama, Louisiana and Arkansas. The depreciation in Mississippi is slight, from 98 to 96, occasioned by storms. The destructive equinoctial storm wasted and stained much fibre in Southern Texas, reducing the State percentage of condition from 94 to 88. In North Carolina and Tennessee, September was cold, and the harvest is late with less favorable prospects of a top crop. A reduction of the percentage of Georgia from 76 to 71, is caused by storms and the increasing prevalence of rust. South Carolina is 3 per cent lower, from similar conditions. In several counties of Florida the caterpillar has been injurious. * * The harvest has been retarded in the Mississippi Valley by an unusual amount of sickness among the laborers. In the State of Mississippi there has been some loss of time on account of political disturbances."

From the November and December reports (to December 1) issued as one:—"As former reports of condition have indicated, the States bordering on the Atlantic all show a reduced product, and those in the Mississippi Valley an increased yield. * * * There is much irregularity in the progress of picking. In some counties of Georgia and Alabama the harvest is nearly over. In Mississippi the work has been delayed by political difficulties and by sickness. * * * Fine weather has been the rule, with a few exceptions; but in Louisiana much fibre has been lost or stained by storms. The effect of the great September storm in Southern Texas proves less disastrous than was at first represented."

From the foregoing we learn—

That from the first of August the rainfall was extremely heavy in a very considerable section of the South. The following shows the aggregate rainfall in each of the districts named during the five months (August, September, October, November and December) for the years designated. We have arranged the stations in classes, putting points

on the coast together and those inland together. Storms are apt to divide themselves up in that way, many confining themselves to the coast; hence the comparison becomes more intelligible and instructive with this arrangement.

RAINFALL BY SECTIONS.

August to December, inclusive, (five months).

STATIONS.	1872.	1873.	1874.	1875.	1876.	1877.
Norfolk, Va.....Inches.	24.28	27.65	16.83	22.11	20.37	33.38
Wilmington, N.C. "	19.37	28.05	20.35	17.17	32.31	18.31
Charleston, S. C. "	25.76	33.21	20.62	15.29	37.88	21.62
Savannah, Ga.... "	24.40	19.90	20.35	15.86	21.62	25.96
Total	93.81	108.90	78.15	70.73	115.18	132.27
Augusta, Ga..... "	14.17	18.57	20.00	16.17	18.11	23.60
Atlanta, Ga..... "	15.44	14.27	17.46	19.15	15.04	11.92
Columbus, Ga..... "	.....	.....	21.14	24.24	18.50	17.16
Macon, Ga..... "	.....	.....	18.01	17.90	16.22	18.87
Total	29.61	32.84	76.61	77.46	67.87	74.55
Mobile, Ala..... "	15.96	26.47	12.54	25.98	26.20	34.21
New Orleans, La "	21.71	21.12	13.42	30.53	18.86	36.44
Galveston, Tex. "	20.17	29.11	21.65	41.67	19.93	45.14
Indianola, Tex.... "	13.24	24.48	22.18	24.32	17.99	26.77
Total	71.08	100.18	69.79	122.50	82.98	142.56
Montgomery, Ala "	16.29	13.27	11.35	23.89	15.01	16.19
Shreveport, La. "	15.14	21.33	15.67	31.12	13.63	26.94
Fayette, Miss.... "	.....	.....	17.20	29.40	11.80	.....
Vicksburg, Miss. "	15.21	12.43	14.22	30.32	15.08	24.97
Columbus, Miss. "	.....	.....	.....	31.03	16.38	33.52
Little Rock, Ark. "	.....	.....	.....	.....	13.56	29.35
Nashville, Tenn. "	12.46	18.73	19.58	16.19	14.69	19.59
Memphis, Tenn. "	12.53	21.06	17.00	22.85	15.40	23.32
Corsecania, Tex.. "	.....	.....	.....	18.91	9.90	22.16
Total	71.63	86.82	95.02	203.71	128.43	196.01

This statement is especially interesting because it proves the existence of conditions in the fall of 1875 which were of course harmful, and not very unlike those prevailing during the same months of 1877; yet in 1875 previous favorable conditions (that is, something in its earlier development) enabled the plant to produce a crop of 4,669,000 bales. We shall have reason to refer to this point again.

1876.

The temperature, rainfall and number of days of rain for the last six months of 1876 were as follows:

1876.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Norfolk Rainfall, inch.	5.50	4.54	9.09	1.52	3.28	1.94
" No. days rain.	10	16	13	7	12	11
" } Hign.	102.5	94.5	93.0	78.0	76.5	59.0
" } Ther. ...	69.0	63.0	52.0	34.0	31.0	11.0
" } Aver.	81.7	78.2	69.7	56.8	49.4	33.6

	1876.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Wilmington. Rainfall, inch.	7.62	8.55	9.41	7.22	1.65	5.48	
" No. days rain.	13	14	10	10	7	9	
" Ther... } High.	....	....	....	....	....	....
" Ther... } Ave.	79.8	78.3	73.7	59.6	53.0	39.1	
Charleston. Rainfall, inch.	11.26	5.10	11.26	11.32	1.35	5.85	
" No. days rain.	10	15	12	13	6	11	
" Ther... } High.	97.0	97.0	94.0	82.0	....	65.0	
" Ther... } Low.	67.0	72.0	60.0	43.0	....	23.0	
" Ther... } Ave.	83.6	82.4	77.9	62.4	56.3	44.1	
Augusta... Rainfall, inch.	6.26	3.6	2.56	3.18	3.54	5.17	
" No. days rain.	11	14	7	7	8	11	
" Ther... } High.	98.0	97.0	95.0	86.0	....	65.0	
" Ther... } Low.	62.0	70.0	48.0	33.0	....	20.0	
" Ther... } Ave.	82.7	81.6	75.2	60.1	52.4	39.1	
Atlanta.... Rainfall, inch.	3.49	5.32	0.80	1.81	3.67	3.44	
" No. days rain.	9	9	4	3	10	6	
" Ther... } High.	96.0	95.0	88.0	78.0	75.0	60.0	
" Ther... } Low.	60.0	72.0	50.0	37.0	31.0	14.0	
" Ther... } Ave.	90.0	90.0	80.0	67.0	52.0	40.0	
Savannah.. Rainfall, inch.	6.11	6.88	2.60	9.15	0.83	4.81	
" No. days rain.	13	14	12	8	3	13	
" Ther... } High.	100.0	97.0	96.0	85.0	81.0	65.0	
" Ther... } Low.	66.0	70.0	55.0	44.0	35.0	20.0	
" Ther... } Ave.	84.5	82.1	78.0	61.7	56.4	44.9	
Columbus.. Rainfall, inch.	4.36	5.31	0.46	3.96	2.60	6.17	
" No. days rain.	10	12	2	2	5	8	
" Ther... } High.	96.0	96.0	94.0	78.0	70.0	68.0	
" Ther... } Low.	68.0	70.0	50.0	36.0	33.0	20.0	
" Ther... } Ave.	84.0	82.0	75.0	64.0	51.0	44.0	
Macon..... Rainfall, inch.	8.67	2.47	2.93	2.96	2.75	5.11	
" No. days rain.	....	....	....	....	....	....
" Ther... } High.	95.0	97.0	92.0	....	76.0	68.0	
" Ther... } Low.	64.0	70.0	60.0	....	30.0	1.0	
" Ther... } Ave.	90.0	87.0	83.0	....	51.0	38.0	
Montgom'y. Rainfall, inch.	6.24	3.05	1.61	0.96	3.42	5.97	
" No. days rain.	14	18	4	2	9	15	
" Ther... } High.	100.0	95.0	95.0	86.5	78.0	69.5	
" Ther... } Low.	68.0	68.5	51.5	42.0	32.0	20.0	
" Ther... } Ave.	82.8	80.9	75.1	62.9	53.2	41.8	
Mobile..... Rainfall, inch.	5.38	11.53	1.76	0.37	5.36	7.18	
" No. days rain.	12	19	3	1	8	14	
" Ther... } High.	96.0	95.0	92.0	82.0	79.0	....
" Ther... } Low.	74.0	71.0	55.0	43.0	35.0	....
" Ther... } Ave.	83.3	80.1	76.8	64.4	55.7	44.4	
N. Orleans. Rainfall, inch.	4.73	4.44	0.26	0.24	4.35	9.57	
" No. days rain.	21	16	7	2	7	18	
" Ther... } High.	....	....	....	....	....	....
" Ther... } Low.	....	....	....	....	....	....
" Ther... } Ave.	83.4	82.2	79.1	67.6	59.6	48.1	
Shreveport. Rainfall, inch.	1.87	2.22	0.62	5.42	2.99	2.38	
" No. days rain.	9	10	6	6	9	8	
" Ther... } High.	98.0	96.0	95.0	85.0	78.0	70.0	
" Ther... } Low.	63.0	69.0	52.0	38.0	32.0	17.0	
" Ther... } Ave.	84.0	83.0	75.0	64.0	53.0	41.0	
Fayette, Miss.—							
" Rainfall, inch.	5.40	5.20	0.50	1.30	2.60	5.20	
" No. days rain.	8	13	2	4	9	10	
" Ther... } High.	92.0	91.0	92.0	84.0	76.0	69.0	
" Ther... } Low.	71.0	70.0	51.0	37.0	29.0	16.0	
" Ther... } Ave.	79.1	77.2	72.0	62.2	50.1	39.2	
Vicksburg . Rainfall, inch.	3.34	2.56	1.95	2.21	2.62	5.74	
" No. days rain.	11	16	6	4	10	15	
" Ther... } High.	97.5	97.0	94.0	86.0	79.5	69.0	
" Ther... } Low.	71.0	67.5	51.5	35.0	32.0	18.5	
" Ther... } Ave.	82.6	80.2	74.0	63.2	52.3	41.2	
Columbus, Miss.—							
" Rainfall, inch.	2.97	3.36	3.45	1.46	1.62	3.50	
" No. days rain.	8	12	3	1	6	8	
" Ther... } High.	92.0	91.0	92.0	84.0	76.0	69.0	
" Ther... } Low.	71.0	70.0	51.0	37.0	29.0	16.0	
" Ther... } Ave.	79.1	77.2	72.0	62.2	50.1	39.2	
Little Rock. Rainfall, inch.	5.89	2.65	0.64	6.95	1.32	2.00	
Nashville .. Rainfall, inch.	5.41	7.51	2.55	2.96	0.93	0.74	
" No. days rain.	11	11	5	7	9	9	
" Ther... } High.	97.0	99.0	....	....	....	....
" Ther... } Low.	53.0	61.0	....	....	....	....
" Ther... } Ave.	80.9	73.7	69.2	56.7	46.4	30.8	
Memphis... Rainfall, inch.	4.38	5.37	3.04	3.95	0.90	2.14	
" No. days rain.	13	14	9	11	10	15	
" Ther... } High.	92.0	95.0	91.0	....	81.0	62.0	
" Ther... } Low.	68.0	65.0	46.0	....	29.0	3.0	
" Ther... } Ave.	81.3	79.1	70.0	53.5	47.1	33.6	

1876.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Galveston..Rainfall,inch.	3.22	10.19	0.64	1.41	3.98	3.71
" No. days rain.	8	11	3	3	9	8
" Ther... { High.	96.0	94.0	94.0	87.0	82.0	70.0
{ Low.	75.0	71.0	62.0	51.0	39.0	25.0
{ Aver.	85.0	83.7	79.4	71.6	60.1	50.2
Indianola..Rainfall,inch.	3.17	4.60	3.51	4.34	2.76	2.48
" No. days rain.	6	10	6	7	6	8
" Ther... { H. zh.	98.0	99.0	93.0	85.0	...	75.0
{ Low.	73.0	71.0	67.0	50.0	...	23.0
{ Aver.	84.3	...	79.4	68.7	59.0	55.0
Corsicana..Rainfall,inch.	3.27	1.58	1.58	0.68	3.84	2.22
" No. days rain.	7	8	5	6	7	6
" Ther... { High.	105.0	101.0	98.0	91.5	77.0	72.0
{ e.w.	70.0	68.0	50.3	36.0	24.0	12.0
{ ve.	83.6	82.7	74.8	66.6	52.3	57.0
Dallas....Rainfall, inch.	1.29	0.29	0.35	0.62	2.47	0.50

CHRONICLE WEATHER REPORTS SUMMARY.

July.—Early in the month the overflow of the Arkansas River did some damage, taking off probably about twelve thousand bales from the prospective yield of that section. Other than this, all the conditions were during the month fairly favorable. In some sections there were complaints of droughts, and in many others too much rain, but as the plant was well started and the fields clean, the harm done was inconsiderable. On the whole, the month closed with the crop in very good condition almost everywhere.

August.—Some reports of caterpillars were current last month, but in the early days of this month they began to be more definite, and as the month progressed it became evident that in some sections harm had actually been done. This was especially true in the prairies and cane-brake sections of Middle Alabama, and also in a portion of Mississippi and the lower third of Texas. Rains were in excess in Tennessee and in portions of the Atlantic and Gulf States; but in the caterpillar district of Alabama and Mississippi there was very little rain, and in the last two or three weeks of August scarcely any, which helped in a measure to check the growth of that plague there, though the loss in Alabama was reported at one-third the crop in that section. Rust and shedding widely complained of, especially in the West and Southwest. Drought in Northern Texas.

September.—The weather this month was very favorable everywhere, except some excessive rains on the very coast of the Atlantic States, and a drought in a few sections, the most important of which was the northern part of Texas. Caterpillars completed their work in Texas the first week of the month, stripping the plants of leaves and of the young bolls in the district between the coast and as high up as Huntsville, Brenham and Gonzales, it being reported that in that section "the early plantings will make from a quarter to a third, and the late " plantings almost nothing."

October.—Drought continued in Northern Texas. The rainfall at Dallas has only been one inch and twenty-six hundredths since the first day of August (three months), and was only one inch and twenty-nine hundredths in July. The weather during the month has generally been excellent for picking purposes. Killing frost was reported in the West and Southwest on the first and second of October, destroying in a considerable section the later growth.

November.—The weather was very favorable everywhere for picking, the first ten or twelve days. A storm during the next four days in Texas was said to have beaten out and destroyed much cotton. The balance of the month generally cold.

December.—Weather quite severe and cold, but not of so much import-

ance, as picking had been in large part finished. Towards the close of the month it became very cold, ice being reported at Galveston and Indianola, and heavy snow in north of Texas, with the "coldest weather" at Dallas ever known." Eleven inches snow at Memphis, &c.

FROM THE AGRICULTURAL BUREAU REPORTS.

From the August and September reports (to September 1) issued as one:—"The September returns, while averaging a higher condition than "is usual in this month, are lower than those of August. * * * In "North Carolina the decline has been from 96 to 93, caused by excessive moisture and rust; in South Carolina from 97 to 91, from blight "caused by great extremes of heat and moisture; in Georgia from 104 "to 90 by drought mainly, and in less degree by rust and caterpillars; "in Florida from 89 to 83 by worms and rust; in Alabama from 103 to "83 from causes similar to those operating in Georgia, with great "prominence of the caterpillar; in Mississippi from 92 to 87, mainly "from too much rain, with some injury from the boll worm and caterpillar; in Texas from 106 to 87, from various causes, operating either "together or separately in the different sections, as drought, rains, rust, "boll worms and caterpillars. In Tennessee and Arkansas the decline "is scarcely perceptible, amounting to but one per cent, and in Louisiana there is a gain of one per cent."

From the October report (to October 1):—"The October reports indicate a reduction of the condition of cotton during the past month in "the ten principal cotton States from an average of 90.5 to 82.7. " * * * The impairment of the crop prospects has been caused by the "equinoctial storm in North Carolina, drought and rust in Georgia, "the caterpillar in Florida and Alabama, the boll worm in Arkansas, "and frost in Tennessee. The caterpillar is confined to the southerly "portion of the Gulf States. Its depredations are most severe in Alabama. In most of the infested districts its reproduction was too late "to destroy more than the top crops."

From the November and December (to Dec. 1) reports, issued as one:—"The returns of November indicated an extremely favorable season for "gathering cotton, except in some portions of North Carolina. * * * "Frost has injured the top crop in the northern belt, notably in Arkansas. "The fibre is cleaner than usual and of superior quality in the southern "belt. Drought in the Gulf States, rain storms in the Carolinas, the "boll worm in the Southwest, and the caterpillar in certain locations "near the Gulf Coast, are chief causes of injury to the crop. The harvest will be completed at a much earlier date than usual. The crop "must be smaller than that of last year, however favorable and long the "remaining season for gathering."

We learn from the foregoing—

First.—That the summer growth this year was subject to more than the usual misfortunes. July was favorable, except the flood in Arkansas; but after that, rains were excessive over a considerable section, and extremely important districts were greatly injured by caterpillars, more especially the prairies and canebrakes of Middle Alabama and the lower third of Texas. There was also a very severe drought in the northern part of Texas, and the

usual complaints from very many points of shedding and rust.

Second.—The fall growth was also shortened by an unusually early killing frost, on the 1st and 2d of October, in the West and Southwest, but the weather for picking was generally as fine as possible up to December, when about all the cotton had been gathered.

Third.—Notwithstanding these serious drawbacks—(1) the Arkansas flood, (2) the caterpillars, (3) excessive rains in sections, (4) shedding and rust, (5) drought, (6) unusually early frost—the crop raised was one of the largest ever gathered. How can we account for this, other than by accepting the fact that a good stand makes such a strong, healthy plant, that it successfully resists ills that a poor plant would succumb to, and, further, has so much fruit forming constantly that it can afford to lose largely by shedding and by caterpillars and by frost, and yet furnish a good yield.

1877.

For the last six months of 1877 the monthly record of rainfall and weather is as follows :

1877.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Norfolk.... Rainfall, inch.	7.97	3.78	11.90	7.82	5.54	4.34
" No. days rain.	18	12	19	10	13	13
" Ther... High.	99.5	94.0	93.0	79.0	77.0	65.0
" " Low.	64.0	66.0	64.0	44.0	28.0	25.0
" " Ave.	79.6	77.4	68.7	62.1	52.2	45.9
Wilmington. Rainfall, inch.	9.35	10.16	20.10	6.68	4.94	6.13
" No. days rain.	9	10	14	10	11	14
" " High.	....	....	....	82.0	83.0	73.0
" " Low.	....	....	....	44.0	28.0	25.0
" " Ave.	80.0	78.5	72.4	65.4	57.5	64.6
Charleston.. Rainfall, inch.	10.21	2.21	6.30	4.87	7.02	4.22
" No. days rain.	12	11	19	15	13	13
" " High.	100.0	93.0	92.0	81.0	80.1	67.0
" " Low.	73.0	71.0	63.0	43.0	34.0	33.0
" " Ave.	84.4	82.3	77.2	69.1	59.2	54.1
Augusta... Rainfall, inch.	1.85	5.25	4.00	4.98	6.06	3.22
" No. days rain.	8	3	14	13	13	10
" " High.	92.0	104.0	87.0	83.0	77.0	71.0
" " Low.	68.0	65.0	54.0	46.0	46.0	24.0
" " Ave.	83.4	84.8	76.4	65.0	54.9	50.2
Atlanta... Rainfall, inch.	3.29	0.77	3.19	3.87	3.19	3.90
" No. days rain.	7	4	5	8	7	6
" " High.	94.0	98.0	82.0	74.0	64.0	66.0
" " Low.	60.0	67.0	57.0	44.0	20.0	24.0
" " Ave.	87.0	87.0	68.0	55.0	55.0	57.0
Savannah. Rainfall, inch.	5.67	3.69	8.92	5.57	3.72	4.06
" No. days rain.	13	14	15	11	11	12
" " High.	103.0	100.0	93.0	83.0	84.0	71.0
" " Low.	64.0	71.0	64.0	50.0	28.0	29.0
" " Ave.	83.8	85.6	76.7	68.7	59.4	55.1

1877.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Columbus.. Rainfall, inch	1.34	2.24	3.30	1.87	4.13	4.75
" No. days rain.	3	4	6	5	6	6
" Ther... High.	98.0	95.0	9.0	82.0	78.0	71.0
" Low.	75.0	73.0	62.0	4.0	23.0	2.0
" ver.	85.0	82.0	76.0	68.0	54.0	53.0
Macon..... Rainfall, inch.	4.17	2.05	3.28	3.70	4.73	5.11
" No. days rain.	9	9	13	10	12	9
" Ther... High.	96.0	94.0	92.0	73.0	73.0	68.0
" Low.	68.0	64.0	67.0	0.0	22.0	2.0
" Ave.	85.0	80.0	77.0	37.0	53.0	4.0
Montgom'y. Rainfall, inch.	3.43	1.07	4.07	2.51	3.75	4.79
" No. days rain.	9	9	13	10	12	9
" Ther... High.	102.0	99.0	97.0	83.5	76.0	71.0
" Low.	6.5	6.5	61.0	4.0	23.5	21.0
" ver.	84.2	81.8	75.3	65.5	53.9	5.2
Mobile..... Rainfall, inch.	3.74	4.69	12.68	6.15	4.75	5.99
" No. days rain.	8	12	15	9	10	10
" Ther... High.	100.0	100.0	95.0	83.0	76.0	7.0
" Low.	6.0	70.0	63.0	48.0	27.0	25.0
" ver.	84.8	82.0	77.6	68.1	56.1	54.3
N. Orleans.. Rainfall, inch.	6.11	2.54	13.21	9.15	6.58	4.96
" No. days rain.	13	9	14	14	8	8
" Ther... High.	99.0	96.0	93.0	84.0	7.0	71.0
" Low.	73.0	63.0	64.0	53.0	38.0	3.0
" ver.	83.7	83.1	78.4	70.2	58.3	55.5
Shreveport. Rainfall, inch.	2.37	0.20	9.93	9.30	3.76	3.75
" No. days rain.	10	1	12	11	8	7
" Ther... High.	99.0	99.0	9.0	88.0	72.0	71.0
" Low.	64.0	65.0	1.0	43.0	19.0	2.0
" ver.	82.0	82.0	76.0	65.4	51.7	51.2
Fayette, Miss.—						
" Rainfall, inch.	4.80	11.20	6.60	....	....	....
" No. days rain.	5	14	10	....	....	....
" Ther... High.	94.0	88.0	92.0	....	....	....
" Low.	64	53.0	68.0	....	....	....
" Ave.	7.2	72.1	6.2	....	....	....
Vicksburg.. Rainfall, inch.	2.95	1.14	6.94	5.00	9.03	2.86
" No. days rain.	9	6	11	10	10	6
" Ther... High.	99.0	99.0	97.0	86.0	74.0	73.0
" Low.	44.0	66.0	55.0	43.0	23.0	25.0
" ver.	82.4	81.1	74.0	66	53.3	54.1
Columbus, Miss.—						
" Rainfall, inch.	4.92	0.47	12.83	2.82	7.29	5.19
" No. days rain.	7	3	10	10	11	10
Little Rock. Rainfall, inch.	0.81	3.56	7.72	6.46	4.93	6.68
" No. days rain.	8	4	7	7	8	8
" Ther... High.	95.0	97.0	96.0	87.0	78.0	81.0
" Low.	79.0	60.0	51.0	38.0	10.0	12.0
" ver.	80.0	87.0	72.0	65.0	52.0	50.0
Nashville .. Rainfall, inch.	3.25	4.16	5.10	2.61	4.93	2.49
" No. days rain.	10	8	12	8	13	11
" Ther... High.	95.0	91.0	80.0	83.0	61.0	69.0
" Low.	66.0	62.0	57.0	38.0	17.0	17.0
" ver.	81.7	77.4	70.6	60.9	47.3	48.2
Memphis... Rainfall, inch.	6.22	6.05	3.11	3.75	5.97	4.44
" No. days rain.	13	10	13	13	15	15
" Ther... High.	96.0	94.0	94.0	84.0	68.0	70.0
" Low.	62.0	62.0	53.0	41.0	16.0	20.0
" ver.	80.4	78.0	71.0	62.8	47.6	5.5
Galveston.. Rainfall, inch.	1.89	1.27	13.85	17.39	6.77	5.86
" No. days rain.	11	7	8	10	7	11
" Ther... High.	99.0	97.0	93.0	87.0	7.0	68.0
" Low.	7.0	70.0	60.0	49.0	30.0	35.0
" ver.	84.4	84.6	80.1	71.5	5.2	53.9
Indianola.. Rainfall, inch.	2.04	1.98	2.29	11.75	4.83	5.92
" No. days rain.	7	7	6	13	8	13
" Ther... High.	97.0	100.0	96.0	93.0	82.0	77.0
" Low.	68.0	73.0	67.0	49.0	28.0	33.0
" ver.	84.9	87.6	81.2	70.2	60.3	56.3
Corsicana... Rainfall, inch.	3.60	2.85	2.33	6.81	6.21	3.96
" No. days rain.	8	5	10	13	7	11
" Ther... High.	102.0	107.0	100.0	98.0	75.0	75.0
" Low.	49.0	61.0	40.0	40.0	22.0	22.0
" ver.	81.1	81.8	75.8	65.4	51.4	51.7
Dallas..... Rainfall, inch.	2.80	3.16	4.25	6.55	7.50	3.17

CHRONICLE WEATHER REPORTS SUMMARY.

July.—This month was generally very favorable for the development of the crop. In some sections the temperature was too low for rapid

progress, but about half the month was hot and forcing, with just rain enough to give the plant a strong, healthy growth. More rain than needful, however, fell in the Memphis districts, and also along the Atlantic coast. Plant continues backward, say about two weeks later than last year almost everywhere. In Texas the coast counties west of the Colorado River reported great injury from caterpillars.

August.—During August the weather was very favorable, with few exceptions; on the coast of North Carolina and in Memphis there was too much rain, and in parts of the Atlantic and Gulf States, and especially in the north of Texas, there were complaints of drought; the last week of the month, Northern Texas was relieved by fine showers. Caterpillars were reported this month in many more sections of Texas, and doing harm in all the lower third of the State. Shedding and rust widely complained of.

September.—The weather was fairly favorable for maturing and gathering the crop, except in the third week. Earlier in the month considerable rain fell, all of which, on account of the previous dry weather, was needed; but in the third week there was a very severe storm of wind and rain in the Gulf, the rainfall being largest at Galveston, New Orleans and Mobile (from eight to ten inches), but reached three and seventy-eight hundredths inches as high up as Vicksburg, and three and three hundredths inches at Nashville. The remainder of the month was generally very favorable. In parts of North and South Carolina there was more rain through the month than desirable.

October.—During the first half of October, except as stated below, the weather was very favorable for maturing and picking cotton. On the 7th there was a very severe local tornado in the northern and north-eastern sections of Texas, but does not seem to have passed outside of Texas with much severity, nor to have passed through the lower third of the State. During the week ending on the 19th, there was another storm in the Gulf, of four or five days' duration, beginning in Lower Texas and extending up into Arkansas, through much of Louisiana and Mississippi, but not reaching Mobile, the rainfall being between three and six inches at different points. Again, in the week ending the 26th there were two days of very heavy rain on the Texas coast, the rainfall at Galveston being nine inches and forty-three hundredths. This storm did not extend far, except in a modified form—that is, the rainfall rapidly became less as it passed inland (being at Corsicana one inch and forty-two hundredths, at Vicksburg one inch and one hundredth, at Shreveport only fifty-four hundredths of an inch, at Memphis fifty-five hundredths of an inch), and yet over much of that section there was a dense mist during the greater part of the week, which interfered with picking and gave rise to very many complaints of rotting and sprouting of bolls, &c. On the Atlantic coast there were also some heavy rains, but not extending inland with any special severity. With the exception of the districts named above, the weather was fairly favorable for crop purposes.

November.—The first ten days of November there was a continuation, especially on the Gulf coast, of the heavy rains so prevalent in October; but later the weather improved, and the most of the remainder of the month was fairly favorable for picking purposes; the principal exception was in the week ending Nov. 23, when it rained on from one to three days at almost all points, the rainfall reaching, in the aggregate, from one to three inches. A killing frost was reported Nov. 10 all over Texas and, in fact, at about that date in almost all parts of the South. Ice formed in many places.

December.—The first three weeks of December, with the exception of

one to three of the first days, were generally very favorable for picking purposes, but the last week less so. Take the month as a whole, however, there was less rain than in the average years; and as the temperature was higher than usual in December, farm-work made better progress.

FROM THE AGRICULTURAL BUREAU REPORTS.

August Report.—“On the Atlantic coast there is frequent mention of inferior fruiting. In the Carolinas there has been much succulence of growth in consequence of abundant moisture. In Georgia and Alabama there has been some injury from drought, but the weather has lately been more seasonable. It has been too wet in much of Mississippi; some cotton in bottom lands in Tippah county has been abandoned from this cause. In Louisiana the promise is extraordinary. In Concordia parish the best crop since 1870 is expected; in Union ‘the best since 1860.’ The prospect in Texas is marred by the appearance of the caterpillar. More than half of the counties reported are infested, not seriously as yet except in a few cases. In Lavaca the bulk of the crop is destroyed; in Gonzales, 75 per cent—‘a complete wreck where preventives were not used.’”

September report.—“The condition of cotton during the first week of September averages for the whole cotton belt the same as in September of last year. Florida, Alabama, Mississippi, Louisiana, Arkansas and Tennessee make higher averages than in 1876. The Carolinas, Georgia and Texas report less favorably, the greatest reduction being in Texas. As compared with last month, Florida, Arkansas and Tennessee only report improvement. The caterpillar is present in all of the Gulf States and in South Carolina, but has done little damage as yet, except in Texas. * * * * In the Atlantic States there is much complaint of rust, mainly resulting from drought, but in some counties from injury by beating storms. In this section the growth is late, and the effects of frost in shortening the harvest are feared.”

October Report.—“The average condition is nearly as high as in 1876. It is 81.1, against 82.7 last year and 88 the year before. The decline in condition during September is less this year than last. Georgia and Tennessee make the same average as in September of last year; North Carolina higher, and all other States lower, though Arkansas declines but one per cent. The weather has been favorable generally up to the middle of September, except upon soils liable to suffer from drought. In portions of Arkansas, and in more limited areas in Texas, heavy rains prevailed in the early part of that month, and from the 16th to the 20th a storm of great violence swept through the cotton belt, to the borders of Texas, doing great damage by beating out the fibre, rotting the bolls, breaking down the plant and overflowing low lands. A loss of at least 20,000 bales is reported from overflows of the Black Warrior and Tombigbee. In Alabama, between the 20th and 30th of September, rains were frequent, and in some localities nearly continuous, retarding or discontinuing picking. Rust is reported throughout the belt, more in the east than in the west, but in few places causing serious damage. The caterpillar has done less damage than was feared, the most serious losses being in Texas and Louisiana. In the more northern States they will cause quite as much benefit as injury, by reducing redundant growth of foliage and hastening maturity of fruitage.”

The foregoing indicates—

First.—That the summer growth was fairly satisfactory, and on the first of September the crop was in good

average condition, and over a very considerable section in excellent condition. Lower Texas, on account of caterpillars, was less favorably situated.

Second.—That September was a satisfactory month in all but the Gulf States the third week, and in parts of North and South Carolina; that the first half of October was also favorable, except a tornado on the 7th in the upper two-thirds of Texas, and a severe storm on the Atlantic coast on the 3d or 4th of the month; for the remaining two weeks and for the first ten days of November there were unusually severe and frequent storms, especially in the western and southwestern States, being more severe on the coast, but extending inland so as to interfere greatly with picking; that December was more favorable than the average for that month. A killing frost was reported in almost all sections by the 12th of November.

DEDUCTIONS FROM THE ABOVE STATEMENTS.

We have thus hastily passed in review the surroundings of the cotton plant during the last half of each year from 1871 to 1877, both inclusive. To complete the record one further set of facts is necessary, indicating the date of frost and the limit of the picking season. The data with regard to the latter point, we have mainly obtained from our own correspondents; but as to frost, we have, in all cases, relied upon the Signal Service Bureau's observations when we could obtain them. Of course, in giving the exact period when picking was finished, there is probably some little difference in the mode of fixing the date; the idea, however, has been for each correspondent to designate the time when that point in the season was *generally* reached in his district, not the day when the last man picked his last bale. We have subsequently averaged each section, but first insert the full returns, as follows.

KILLING FROST AND END OF PICKING SEASON.

	1871.	1872.	1873.	1874.	1875.	1876.	1877.
Wilmington—							
First frost	Nov. 16	Oct. 15	Nov. 20	Nov. 2	Oct. 17	Oct. 17	Nov. 7
Killing frost ..	Nov. 16	Nov. 16	Nov. 20	Nov. 2	Oct. 17	Oct. 17	Nov. 7
End of picking	Nov. 20	Dec. 20	Dec. 25	Dec. 10	Dec. 25	Dec. 25	Dec. 20
Charleston—							
First frost	Nov. 15	Nov. 15	Oct. 29	Nov. 1	Oct. 17	Oct. 17	Nov. 11
Killing frost ..	Nov. 16	Nov. 17	Nov. 20	Dec. 16	Dec. 18	Dec. 1	Nov. 12
End of picking	Nov. 18	Dec. 15	Dec. 20	Dec. 10	Dec. 20	Dec. 20	Dec. 20
Augusta—							
First frost	Nov. 16	Oct. 31	Oct. 3	Oct. 14	Oct. 16	Oct. 8	Nov. 11
Killing frost ..	Nov. 16	Nov. 15	Nov. 5	Nov. 1	Nov. 17	Nov. 10	Nov. 12
End of picking	Dec. 15	Dec. 25	Dec. 31	Dec. 25	Dec. 10	Dec. 25	Dec. 31
Atlanta—							
First frost ....	.....	Oct. 11	Oct. 7	Oct. 13	Oct. 13	Oct. 2	Nov. 7
Killing frost ..	Nov. 16	Nov. 15	Oct. 29	Nov. 1	Nov. 17	Nov. 10	Nov. 11
End of picking	Nov. 15	Nov. 25	Dec. 5	Dec. 25	Dec. 10	Dec. 15	Dec. 20
Savannah—							
First frost ....	.....	Oct. 15	Nov. 14	Oct. 15	Dec. 9	Nov. 10	Nov. 10
Killing frost ..	Nov. 16	Nov. 15	Nov. 20	Dec. 16	Dec. 9	Nov. 10	Nov. 30
End of picking	Dec. 10	Dec. 25	Dec. 10	Nov. 30	Dec. 15	Dec. 20	Dec. 18
Columbus, Ga.—							
First frost	Oct. 12	.....	Oct. 8	Oct. 14	Oct. 15	Nov. 11	Nov. 10
Killing frost ..	Nov. 17	Nov. 15	Oct. 28	Nov. 1	Dec. 7	Nov. 11	Nov. 30
End of picking	.....	.....	Nov. 20	Nov. 15	Dec. 20	Dec. 20	Dec. 25
Macon—							
First frost	Oct. 12	Oct. 15	Oct. 8	Oct. 14	Oct. 14	Oct. 8	Nov. 10
Killing frost ..	Nov. 16	Nov. 15	Oct. 29	Nov. 1	Dec. 7	Nov. 11	Nov. 30
End of picking	Dec. 12	Dec. 12	Dec. 12	Dec. 15	Dec. 10	Dec. 6	Dec. 20
Montgomery—							
First frost	Oct. 12	Oct. 15	.....	Oct. 13	Oct. 8	Nov. 10	Nov. 4
Killing frost ..	Nov. 18	Nov. 10	Oct. 29	Nov. 2	Dec. 8	Nov. 10	Nov. 11
End of picking	Nov. 10	Nov. 16	Nov. 25	Dec. 10	Dec. 16	Dec. 17	Dec. 20
Mobile—							
First frost	Oct. 12	Oct. 15	Oct. 8	Oct. 14	Oct. 12	Oct. 2	Nov. 12
Killing frost ..	Nov. 18	Nov. 13	Oct. 29	Nov. 2	Dec. 8	Nov. 8	Nov. 12
End of picking	Nov. 15	Nov. 30	Nov. 30	Dec. 1	Dec. 25	Dec. 15	Dec. 25
New Orleans—							
First frost	Nov. 18	Nov. 16	Oct. 8	Dec. 10	Nov. 11	Oct. 3	Nov. 12
Killing frost ..	Dec. 3	Nov. 16	Oct. 29	None.	None.	Nov. 19	Nov. 30
End of picking	.....	.....	.....	.....	Jan. 10	Dec. 20	Jan. 31
Shreveport—							
First frost	Nov. 16	Nov. 18	Oct. 20	Nov. 1	Oct. 19	Oct. 1	Oct. 20
Killing frost ..	Nov. 16	Nov. 18	Oct. 28	Nov. 1	Nov. 16	Oct. 1	Nov. 7
End of picking	Dec. 1	Dec. 1	Dec. 15	Dec. 4	Dec. 20	Dec. 24	Dec. 24
Vicksburg—							
First frost ....	.....	.....	Oct. 8	Oct. 14	Oct. 20	Oct. 2	Nov. 7
Killing frost ..	Nov. 16	Nov. 17	Oct. 29	Nov. 1	Dec. 7	Oct. 8	Nov. 11
End of picking	Dec. 10	Dec. 20	Dec. 31	Dec. 5	Dec. 31	Dec. 10	Dec. 31
Fayette, Miss.—							
First frost ....	.....	.....	Oct. 7	Oct. 14	Oct. 31	Oct. 2	Nov. 7
Killing frost ..	.....	.....	Oct. 29	Nov. 1	Nov. 11	Oct. 2	Nov. 11
End of picking	.....	.....	.....	.....	Jan. 10	Dec. 20	Dec. 25
Little Rock—							
First frost ....	.....	.....	.....	.....	.....	.....	Nov. 3
Killing frost ..	Nov. 16	Nov. 16	Oct. 29	Nov. 1	Nov. 16	Oct. 8	Nov. 3
End of picking	Dec. 10	Dec. 31	Dec. 20	Dec. 10	Feb. 1	Dec. 15	Feb. 1
Nashville—							
First frost	Sept. 30	Oct. 10	Oct. 8	Oct. 13	Oct. 12	Oct. 2	Oct. 5
Killing frost ..	Nov. 17	Oct. 11	Oct. 29	Oct. 14	Oct. 12	Oct. 8	Nov. 7
End of picking	Dec. 1	Dec. 31	Dec. 20	Dec. 1	Dec. 20	Dec. 5	Dec. 15
Memphis—							
First frost	Sept. 30	Oct. 10	Oct. 8	Oct. 13	Oct. 12	Oct. 2	Oct. 5
Killing frost ..	Nov. 17	Oct. 14	Oct. 8	Oct. 13	Oct. 12	Oct. 2	Nov. 6
End of picking	Feb. 17	Feb. 24	Jan. 10	Dec. 12	Feb. 1	Dec. 15	Feb. 10
Galveston—							
First frost	Oct. 30	.....	.....	.....	Dec. 7	Dec. 6	Nov. 10
Killing frost ..	Dec. 2	Nov. 14	Oct. 29	None.	Dec. 7	Dec. 6	Nov. 10
End of picking	Nov. 18	Dec. 15	Dec. 10	Dec. 1	Dec. 10	Dec. 7	Nov. 24
Indianola—							
First frost	Oct. 30	.....	.....	Nov. 12	Oct. 20	Nov. 13	Oct. 19
Killing frost ..	Dec. 2	Nov. 14	Oct. 29	None.	Dec. 7	Nov. 19	Nov. 10
End of picking	Nov. 18	Dec. 15	Dec. 10	Nov. 30	Dec. 1	Dec. 7	Nov. 24

	1871.	1872.	1873.	1874.	1875.	1876.	1877.
Corsicana—							
First frost				Oct. 31	Oct. 20	Oct. 1	Oct. 22
Killing frost	Nov. 15	Nov. 17	Oct. 28	Nov. 20	Nov. 16	Oct. 1	Nov. 6
End of picking	Nov. 18	Dec. 25	Dec. 15	Nov. 29	Dec. 15	Dec. 27	Dec. 10
Dallas—							
First frost						Oct. 1	Oct. 22
Killing frost						Oct. 1	Nov. 6
End of picking						Dec. 27	Dec. 10

This table, with all its details, will frequently be found of use, and in fact is necessary for comparison in any close analysis or estimate of a crop secured. But our present purpose will be better attained by having the substance of these facts in a less extended form. We have therefore prepared the following, which gives, as near as may be, from the foregoing, the average date in each State of the close of the picking season for each year.

End of Picking Season in each State.							
	1871.	1872.	1873.	1874.	1875.	1876.	1877.
North Carolina	Nov. 20	Dec. 20	Dec. 25	Dec. 10	Dec. 25	Dec. 25	Dec. 20
South Carolina	Nov. 18	Dec. 15	Dec. 20	Dec. 10	Dec. 20	Dec. 20	Dec. 20
Georgia	Dec. 5	Dec. 15	Dec. 10	Dec. 15	Dec. 15	Dec. 20	Dec. 22
Alabama	Nov. 12	Nov. 25	Nov. 30	Dec. 5	Dec. 20	Dec. 16	Dec. 25
Mississippi	Dec. 10	Dec. 20	Dec. 31	Dec. 5	Dec. 31	Dec. 15	Dec. 25
Louisiana	Dec. 1	Dec. 1	Dec. 15	Dec. 4	Dec. 20	Dec. 24	Dec. 24
Arkansas	Dec. 10	Dec. 31	Dec. 20	Dec. 10	Feb. 1	Dec. 15	Feb. 1
Tennessee	Jan. 15	Feb. 1	Dec. 31	Dec. 10	Jan. 15	Dec. 10	Jan. 15
Texas	Nov. 18	Dec. 20	Dec. 12	Dec. 1	Dec. 10	Dec. 20	Dec. 5

In abridging the frost statements from the same table, we designate two sections in every State where any important differences of date appear between the inland and coast counties.

Date of Killing Frost in Each State.							
	1871.	1872.	1873.	1874.	1875.	1876.	1877.
North Carolina	Nov. 16	Nov. 16	Nov. 20	Nov. 2	Oct. 1	Oct. 17	Nov. 7
So. Carolina—							
Coast	Nov. 16	Nov. 17	Nov. 20	Dec. 16	Dec. 18	Dec. 1	Nov. 12
Inland	Nov. 16	Nov. 15	Nov. 5	Nov. 1	Nov. 17	Nov. 10	Nov. 12
Georgia—							
Coast	Nov. 16	Nov. 15	Nov. 20	Dec. 16	Dec. 9	Nov. 10	Nov. 30
Inland	Nov. 16	Nov. 15	Nov. 5	Nov. 1	Nov. 17	Nov. 10	Nov. 12
Alabama	Nov. 18	Nov. 13	Oct. 29	Nov. 2	Dec. 8	Nov. 8	Nov. 12
Mississippi	Nov. 16	Nov. 17	Oct. 29	Nov. 1	Dec. 7	Oct. 8	Nov. 11
Louisiana—							
New Orleans	Dec. 3	Nov. 16	Oct. 29	None.	None.	Nov. 19	Nov. 30
Shreveport	Nov. 16	Nov. 18	Oct. 28	Nov. 1	Nov. 16	Oct. 1	Nov. 7
Arkansas	Nov. 16	Nov. 16	Oct. 29	Nov. 1	Nov. 16	Oct. 8	Nov. 3
Tennessee—							
Nashville	Nov. 17	Oct. 14	Oct. 29	Oct. 14	Oct. 12	Oct. 8	Nov. 7
Memphis	Nov. 17	Oct. 14	Oct. 8	Oct. 13	Oct. 12	Oct. 2	Nov. 6
Texas—							
Corsicana	Nov. 15	Nov. 17	Oct. 28	Nov. 20	Nov. 10	Oct. 1	Nov. 6
Galveston	Dec. 2	Nov. 11	Oct. 29	None.	Dec. 7	Dec. 6	Nov. 10

An examination of these figures will show that, by itself and independent of other facts, neither the length of the picking season nor the date of frost is an event controlling the yield. They are both elements of some importance in the problem to be solved, and at times quite decisive, but chiefly because of previous conditions. For instance, in 1874 (the year of the great spring flood), the start on the flooded low lands of the Mississippi Valley was over a month delayed; furthermore, the imperfect stands everywhere secured, and subsequently the unusual summer drought (both contributing to lessen the yield of the plant) made it highly important that the full growth should be attained and a good top crop saved. A late killing frost that year was, therefore, in every section, of the first importance. Yet the date on which it visited Memphis was very early, October 13, and by the first of November, not only throughout the whole of the Mississippi Valley and its tributaries, but almost everywhere else, vegetation was killed. On the other hand, in 1875 and in 1876, the stand was good and the bottom and middle crops were excellent, so that when, during the first eight days of October, 1876, the frost stopped all growth in the West and Southwest, and in 1875, during the first half of the same month, checked vegetation in half of the Memphis and Nashville districts, there was sufficient cotton already made in most of those sections to keep the full working force busy up to or beyond Christmas. Before, however, considering these points further, it will be well to recall the controlling features of each year's progress and growth, so that we can scrutinize as a whole the early as well as later development and yield of each season. But first, for more convenient reference, we have epitomized the conditions of weather &c., for the last six months, given in detail above :

- 1871 *July*, weather apparently very favorable. *August*, also very favorable, with limited exceptions, yet plant shedding badly everywhere. *September to December*, weather favorable, but plant sheds and little fruit ripened. *Killing frost* November 16 and 18. *Picking* closed about November 15 to December 10.
- 1872 *July*, too rainy in about one-third the South. Alabama rivers overflow; rest favorable. *August*, drought complained of in all but a portion of Atlantic States, where there was too much rain; bad shedding reported in extensive districts. *September*, unfavorable reports continued, but weather fairly favorable. *October to December*, fairly favorable; horse disease delays crop. *Killing frost* was delayed everywhere, except in Tennessee, till November 13th to 18th. *Picking* closed from December 15 to 31, though at some points earlier.
- 1873 *July* quite favorable. *August*, too much rain on the coast at Charleston, Mobile, New Orleans and Galveston, elsewhere fairly satisfactory; caterpillars did injury in Central Georgia and lower half Alabama; shedding badly in some districts. *September*, except on the very coast, no more rain than desirable. *October to December* fairly favorable. *Killing frost* in the Gulf and western States October 28 and 29, and in the Atlantic States November 5th and 20th. *Picking* closed from December 1 to 31, though at a few points earlier.
- 1874 *July* fairly favorable, except severe local storms on the coast and drought in Memphis district. *August*, Memphis drought continued and extended until taking in all Tennessee, Arkansas, northern portions of Louisiana, Alabama, Mississippi and Texas; shedding very profuse. *September*, fine rains everywhere and weather favorable. *October*, killing frost at Memphis and Nashville October 13 and 14, and almost everywhere else at close of month. *November and December* favorable. *Killing frost* generally November 1. *Picking* closed generally before December 10.
- 1875 *July* fairly favorable, though rains were more abundant at some points than needed. *August*, rains very excessive at many points, and Mississippi overflowed at Memphis; shedding, &c., widely and strongly complained of. *September*, less rain, except in Texas (mainly the coast) and parts of Alabama and Georgia. *October to December*--Excessive rains in November and December in Mississippi Valley and Gulf States, and the weather turned quite cold in December. *Killing frost* at Memphis and Nashville, October 12, and elsewhere from November 10 to December 18. *Picking* closed from about December 15 to 31.
- 1876 *July* fairly favorable, though the rains in considerable sections were more abundant than needed. *August*, caterpillars reported to have done great harm in lower third of Texas, parts of Alabama and Mississippi, and rains excessive in some sections, though not in the Alabama and Mississippi caterpillar districts. *September*, caterpillars did great harm in Texas; severe drought in northern part of Texas; excessive rains on the Atlantic coast; otherwise favorable. *October*, killing frost in Mississippi Valley October 2d; drought in Northern Texas continued; otherwise favorable. *November*, quite favorable, except closed cold. *December*, cold. *Killing frost* in the West and Southwest from October 1 to 8, elsewhere November 8 and 10. *Picking* closed from December 10th to 25th.

Such were the more prominent features of the con-

dition for the latter half of each season. That we may at a glance see the changing influences operating from month to month for all the seasons, and be able to compare them readily, we give the following summary :

Year.	Spring Weather.	Stand.	July to Sept.	Oct. to Dec.
1870	<i>March</i> cold. <i>April</i> fairly favorable. <i>May</i> favorable. <i>June</i> very favorable everywhere.	Stand excellent, very clean and strong.	Favorable and complaints few, except shedding.	Favorable weather. Killing frost from Oct. 20 to Nov. 20. Picking closed Dec. 5 to 25.
1871	<i>March</i> cold, rainy. <i>April</i> less so. <i>May</i> cold, rainy, except Texas. <i>June</i> cold, rainy.	Sickly, weak and very grassy everywhere.	Rainfall generally an average, but drought very harmful.	Favorable weather. Killing frost Nov. 16 to 18. Picking closed Nov. 15 to Dec. 10.
1872	<i>March</i> fairly favorable. <i>April</i> generally very favorable. <i>May</i> favorable. <i>June</i> generally very favorable.	Good, clean and strong almost everywhere.	Drought at some points and excessive rains at others. Shedding, &c.	Favorable. Killing frost Oct. 14 and Nov. 13 to 18. Picking closed Dec. 15 to 31.
1873	<i>March</i> favorable, except last week. <i>April</i> cold, dry. <i>May</i> , first two weeks favorable, rest too rainy in one-third the South. <i>June</i> too rainy in same third.	Two-thirds good and one-third poor and grassy.	Too much rain on the coast. Caterpillars in Alabama and Georgia shedding badly.	Favorable weather. Killing frost Oct. 28 to Nov. 20. Picking closed Dec. 1 to 31.
1874	<i>March</i> cold, rainy; rivers overflow. <i>April</i> cold, rainy. <i>May</i> , severe drought, except Atlantic States. <i>June</i> , last half favorable; first half, drought in some sections.	Very irregular and imperfect, but clean and well cultivated.	Great drought in Tennessee, Arkansas, &c., with high temperature.	Favorable weather. Killing frost Oct. 13 to 31. Picking closed before Dec. 10.
1875	<i>March</i> cold. <i>April</i> , first cold; rest favorable. <i>May</i> , first two weeks cold; rest very favorable. <i>June</i> very favorable.	Stand excellent and clean everywhere; never better.	Aug. to Dec., rains very excessive at many points. Shedding badly.	Excessive rain. Killing frost Oct. 12 to Dec. 18. Picking closed Dec. 15 to 31.
1876	<i>April</i> , excessive rains in western and Gulf States; rivers overflow, quickly recede. <i>May</i> generally very favorable. <i>June</i> very favorable, except heavy showers near Atlantic coast.	Stand good and clean; not quite as perfect, though, as year previous.	Caterpillars in Ala., Miss., and Texas. Drought in North Texas. Killing frost in Miss. Valley Oct. 2.	Favorable. Killing frost Oct. 1 to 8, except in Atlantic States. Picking closed Dec. 10 to 25.

The reader will, of course, refer back to the detailed statements for the different years and months, using the above only as suggestive of the full facts. As to the conclusions to be drawn, there can be but one opinion.

In 1870 we see that the spring weather was almost unexceptionable; the stand was perfect; the summer growth was satisfactory; the picking season was favorable; and the yield was 4,352,000 bales, against 3,154,900 bales in 1869; or an *increase* of 37.94 per cent in the crop on an acreage increased only 13.90 per cent.

In 1871 the spring weather was very cold and rainy; the stand was very poor and grassy; the summer weather gave the average amount of rain, and yet there were complaints of drought and the shedding was very great, as would be the case with any plant with only surface roots in summer weather; the picking season every way favorable, but shedding still complained of; the yield was 2,974,000 bales, against 4,352,000 bales in 1870; or a *decrease* of 31.66 per cent in the crop on an acreage decreased only 10.75 per cent.

In 1872 the spring weather was favorable; the stand was good and clean; the summer weather was far from favorable, drought in some localities, excessive rains in others, and shedding reported everywhere; and yet with a good picking season the plant was found to be well fruited still, and the yield was 3,930,500 bales, against 2,974,000 bales in 1871, and 4,352,000 in 1870, or, *compared with* 1871, on an acreage increased 9.75 per cent, the crop increased 32.13 per cent, and *compared with* 1870, on an acreage decreased 2.05 per cent, the crop decreased 9.69 per cent.

In 1873 the spring weather in about one-third of the South was very rainy and in about two-thirds favorable; the stand was good and the fields clean in two-thirds and

poor and grassy in the other third ; the summer weather was fairly favorable except too much rain on the coast half of States ; caterpillars did injury in Central Georgia and lower half of Alabama, and shedding was complained of pretty generally ; the picking season was fairly favorable, except an early frost in the western and Gulf States ; the yield was 4,170,000 bales. against 3,930,500 bales in 1872 ; or *compared with* 1872, on an acreage increased 10.59 per cent, the crop increased only 6.09 per cent, and *compared with* 1870, on an acreage increased 8.32 per cent, the crop decreased 4.18 per cent.

In 1874 the spring was first very rainy, so that in March all the rivers overflowed, being the worst flood for thirty years, and the waters did not fully recede till after the first of June ; then in May there was a very severe drought everywhere except in the Atlantic States, continued in many sections into almost the middle of June ; March and April were also very cold ; as a result of these conditions, the fields were clean, but the start was late everywhere, and very late in the flooded district, and very imperfect indeed in all but the Atlantic States ; in summer was the great drought and the abundant shedding, but if the reader will examine the comparative rainfall and thermometer, he will see that, except in a portion of the Memphis district, it was no more severe than has before occurred when the result was very much less disastrous ; so that we can see no way to account for much of the injury, (the actual killing of the plant in many sections), except by saying that the plant never became well rooted in May and June, and therefore was less able to resist drought ; the picking season was excellent, save an early frost in the district of the spring flood, which cut off much from the later-planted crop in that section ; the yield was 3,833,000 bales, against 4,170,000 bales in 1873 and 4,352,000 bales

in 1870; or, *compared with* 1873, on an acreage increased 1.54 per cent, the crop decreased 8.08 per cent, and *compared with* 1870, on an acreage increased 9.98 per cent, the crop decreased 11.93 per cent.

In 1875, the spring weather was favorable almost everywhere; the stand was excellent, never better: in the summer, however, there were very excessive rains, the Mississippi overflowed, and the plants were said to shed badly; the picking season was generally extremely unfavorable and rainy, almost in that particular equal to the picking season of 1877; and yet the yield was 4,669,000 bales, against 3,833,000 bales in 1874, and 4,352,000 bales in 1870; or, *compared with* 1874, on an acreage increased 5.95 per cent, the crop increased 21.81 per cent, and *compared with* 1870, on an acreage increased 16.52 per cent, the crop increased 7.28 per cent.

In 1876, the spring weather was not everywhere as favorable as the previous spring, and yet generally very favorable; there was a Mississippi overflow in April, the water, however, soon receding; stand was very good, but not quite up to 1875, and the fields were generally clean and well cultivated. in summer there was considerable rain in sections, a severe drought in Northern Texas, and complaints of shedding and of caterpillars in Alabama, Mississippi, and coast half of Texas, the latter doing considerable harm in Texas, but not much elsewhere: the picking season was fairly favorable, except continued drought in Northern Texas, and also except a killing frost in the Mississippi Valley October 2; notwithstanding these drawbacks, the yield was 4,485,000 bales, against 4,669,000 bales in 1875, and 4,352,000 bales in 1870; or, *compared with* 1875, on an acreage decreased 1.16 per cent, the crop decreased 3.94 per cent, and *compared with* 1870, on an acreage increased 15.18 per cent, the crop increased 3.06 per cent.

Such are the conclusions reached from a review of the history of cotton production for seven years. Little more on this branch of our subject remains to be said. The facts thus brought together point to an almost controlling influence of a good stand upon the results of the crop. The character and nature of the plant and its growth and cultivation—previously given—suggested such a relationship, but this experience in production would seem to leave no other possible explanation of the different seasons' results. We conclude, then, that rain, drought, shedding and even caterpillars are shorn of much of their power for evil, if the plant on the first of July is well started; and hence reports of harm done from unfavorable conditions in summer and fall can only be correctly measured when interpreted in the light of the early development.

AGRICULTURAL BUREAU'S FIGURES OF CONDITION.

In this and the previous chapter we have intended to include the substance of the Agricultural Bureau's monthly reports except the figures of condition. As these figures are frequently needed for comparison, we give them below, adding the November percentages of yield and the estimate of the crop each year worked out from them.

1870.

STATES.	Actual Product of 1869, in bales.	Agric'l Bureau figures of condition on the first of each month.				Per Ct. Estimat'd yield, Product Est. of of Bureau Bureau for 1870, Nov. in bales.	
		July.	Aug.	Sept.	Oct.	Nov.	
North Carolina ...	210,000	94	104	105	107	116	213,600
South Carolina ...	256,000	96	101	105	104	123	311,800
Georgia	350,000	101	100	105	99	120	420,000
Florida	45,000	98	110	115	102	125	56,250
Alabama	505,000	102	102	100	96	110	555,500
Mississippi	500,000	95	95	100	99	108	510,000
Louisiana	425,000	101	100	108	92	112	476,000
Texas	322,400	97	97	109	105	131	422,344
Arkansas	321,500	101	110	110	105	119	382,585
Tennessee	220,000	85	90	100	97	112	216,400
Total	3,154,900						3,657,559

The usual June report of condition was not prepared this year.

1871.

STATES.	Actual Product of 1870, in bales.	Agricultural Bureau figures of condition on the first of each month.					Per Ct. Estimat'd yield, Product Est. of Bureau for 1871,	in bales
		June	July	Aug.	Sept.	Oct.	Nov.	
N. Carolina.	275,000	90	99	91	82	80	80	220,000
So. Carolina	348,000	92	100	96	80	75	68	236,610
Georgia	600,000	82	82	80	78	72	67	402,000
Florida	60,000	103	88	83	75	73	58	31,800
Alabama	645,000	83	81	81	80	75	73	470,850
Mississippi ..	650,000	84	80	80	80	76	72	468,000
Louisiana ..	600,000	90	75	83	77	73	65	390,000
Texas	400,000	93	93	84	80	70	68	272,000
Arkansas....	474,000	83	90	93	95	82	85	402,900
Tennessee ..	300,000	90	98	100	96	94	90	270,000
Total ...	1,352,000							3,167,190

1872.

STATES.	Actual Product of 1871, in bales.	Agricultural Bureau figures of condition on the first of each month.					Per Ct. Estimat'd yield, Product Est. of Bureau for 1872,	in bales.
		June	July	Aug.	Sept.	Oct.	Nov.	
N. Carolina.	175,000	96	91	99	101	90	121	211,750
So. Carolina	255,000	92	97	98	95	86	124	316,200
Georgia	328,000	96	101	104	96	88	119	390,320
Florida	40,000	95	102	96	92	75	102	40,800
Alabama	505,000	105	103	107	88	82	111	560,550
Mississippi ..	495,000	100	109	112	90	78	112	554,400
Louisiana ..	396,000	104	103	101	86	72	121	479,160
Texas	280,000	100	105	103	94	85	126	352,800
Arkansas....	290,000	98	95	96	78	75	105	301,500
Tennessee ..	210,000	101	104	104	92	90	110	231,000
Total ...	2,974,000							3,441,480

1873.

STATES.	Actual Product of 1872, in bales.	Agricultural Bureau figures of condition on the first of each month.					Per Ct. Estimat'd yield, Product Est. of Bureau for 1873,	in bales.
		June	July	Aug.	Sept.	Oct.	Nov.	
N. Carolina.	200,000	85	91	95	95	88	98	196,000
So. Carolina	260,000	88	82	87	86	80	92	239,200
Georgia	505,000	91	94	95	90	82	97	489,850
Florida	60,000	102	99	103	85	76	97	58,200
Alabama	550,000	93	85	91	85	78	91	500,500
Mississippi ..	625,000	92	83	88	82	75	85	531,250
Louisiana ..	520,500	91	80	86	80	72	80	416,400
Texas	195,000	86	78	83	92	80	112	554,400
Arkansas....	455,000	92	106	93	93	83	102	461,100
Tennessee ..	260,000	90	96	95	92	90	102	265,200
Total ...	3,930,500							3,715,100

1874.

STATES.	Actual Product of 1873, in bales.	Agricultural Bureau figures of condition on the first of each month.					Per Ct. yield, Est. of Bureau Nov.	Estimat'd Product of Bureau for 1874, in bales.
		June.	July.	Aug.	Sept.	Oct.		
N. Carolina.	265,000	89	102	95	87	83	89	235,850
So. Carolina	350,000	81	83	97	86	80	92	322,000
Georgia . . .	500,000	80	91	91	77	80	93	465,000
Florida	75,000	90	96	102	77	81	100	75,000
Alabama . . .	575,000	82	92	90	81	75	95	516,250
Mississippi . .	675,000	73	87	89	74	74	90	607,500
Louisiana . .	510,000	70	73	83	62	62	85	433,500
Texas	500,000	90	102	105	65	70	90	450,000
Arkansas . . .	420,000	90	94	87	47	55	60	252,000
Tennessee . .	300,000	85	97	83	52	56	57	171,000
Total	4,170,000							3,558,100

1875.

STATES.	Actual Product of 1874, in bales.	Agricultural Bureau figures of condition on the first of each month.					Per Ct. yield, Est. of Bureau Nov.	Estimat'd Product of Bureau for 1875, in bales.
		June.	July.	Aug.	Sept.	Oct.		
N. Carolina.	273,000	92	95	99	90	85	91	248,430
So. Carolina	360,000	97	99	84	80	77	76	273,630
Georgia . . .	460,000	91	97	86	76	71	74	340,400
Florida	55,000	94	101	85	75	70	90	49,500
Alabama . . .	520,000	101	102	93	87	94	102	530,400
Mississippi . .	550,000	100	103	104	98	96	111	610,500
Louisiana . .	520,000	95	105	99	88	90	100	520,000
Texas	535,000	96	93	93	91	88	114	600,900
Arkansas . . .	400,000	90	104	108	99	103	135	540,000
Tennessee . .	160,000	99	109	107	96	90	116	185,600
Total	3,833,000							3,908,330

1876.

STATES.	Actual Product of 1875, in bales.	Agricultural Bureau figures of condition on the first of each month.					Per Ct. yield, Est. of Bureau Nov.	Estimat'd Product of Bureau for 1876, in bales.
		June.	July.	Aug.	Sept.	Oct.		
N. Carolina.	260,000	101	105	96	93	84	92	239,200
So. Carolina.	330,000	98	90	97	91	80	99	326,700
Georgia . . .	420,000	103	103	104	90	87	110	462,000
Florida	60,000	82	98	89	83	80	100	60,000
Alabama . . .	600,000	91	100	103	83	69	77	462,000
Mississippi . .	670,000	92	94	92	87	83	78	522,600
Louisiana . .	650,000	89	89	89	90	82	83	539,500
Texas	690,000	99	99	106	87	91	100	690,000
Arkansas . . .	650,000	95	97	98	97	86	71	481,000
Tennessee . .	339,000	93	103	120	119	91	101	342,390
Total	4,669,000							4,125,390

1877.

STATES.	Actual Product of 1876, in bales.	Agricultural Bureau figures of condition on the first of each month.					Per Ct. yield, Est. of Bureau for 1877,	Estimat'd Product of Bureau for 1877, in bales.
		June.	July.	Aug.	Sept.	Oct.		
N. Carolina.	225,000	82	88	88	83	85	91	204,750
So. Carolina.	315,000	91	87	88	85	79	90	283,500
Georgia.....	478,000	89	90	85	77	77	92	439,760
Florida.....	55,000	92	95	93	94	88	97	53,350
Alabama.....	560,000	90	94	94	91	88	105	588,000
Mississippi...	639,000	91	93	90	88	80	92	587,880
Louisiana.....	578,000	98	102	106	92	77	97	560,660
Texas.....	735,000	91	94	96	70	61	82	602,700
Arkansas.....	590,000	94	94	93	99	98	110	649,000
Tennessee...	310,000	94	96	90	100	100	115	356,500
Total.....	4,485,000							4,326,100

In November the Bureau's figures are always intended to indicate the actual yield. They are not made up from the monthly statements of condition, but are "estimates" "for each county of the total product of the year, expressed "as percentages of the actual crop of last year." In using the Bureau's reports, however, we have always found that a more useful and safer guide for crop estimates could be obtained in October, one month earlier, from an average of the condition figures for the five months, with the changes of acreage incorporated. As an illustration we give a statement thus prepared for the present year.

STATES.	Production 1876-77, Bales.	Condition this year compared with last.		Acreage this year compared with last.		Yield of 1877-78, Estimat'd.
		Better	Worse.	Inc'ase.	Dec.	
North Carolina...	225,000	.....	11.0	.....	4.0	191,250
South Carolina...	315,000	.....	5.2	.....	3.0	289,170
Georgia.....	478,000	.....	13.8	1.0	.....	416,816
Florida.....	55,000	6.0	.....	1.0	.....	58,850
Alabama.....	560,000	1.4	.....	2.0	.....	579,040
Mississippi.....	639,000	.....	1.2	4.0	.....	656,892
Louisiana.....	578,000	6.6	.....	6.0	.....	650,828
Texas.....	735,000	.....	11.6	15.0	.....	759,990
Arkansas.....	590,000	1.0	.....	5.0	.....	625,100
Tennessee.....	310,000	.....	9.2	2.0	.....	287,680
Total production..	4,485,000	.....	.....	.....	.....	4,515,916

The above indicates that the crop which is now being marketed will reach a total of 4,515,916 bales, or 30,493 bales more than last year; this, according to present appearances, will prove to be a pretty close approximation to the actual out-turn.

AGRICULTURAL BUREAU'S ACREAGE PERCENTAGES

To complete the record of the Bureau's reports, we give in the following its statements of changes in acreage from year to year.

ACREAGE EACH YEAR COMPARED WITH PREVIOUS YEAR.

STATES.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.
N'rth Carolina	108·0	86·0	116·0	114·0	89·0	102·0	98·0	96·0
South Carolina	105·0	87·0	109·0	102·0	91·0	106·0	99·0	97·0
Georgia	107·0	88·0	112·0	114·0	90·0	96·0	94·0	101·0
Florida	107·0	102·0	110·0	103·0	91·0	99·0	89·0	101·0
Alabama	113·0	87·0	111·0	109·0	86·0	104·0	100·0	102·0
Mississippi	112·0	85·0	110·0	104·0	88·0	102·0	98·0	104·0
Louisiana	120·0	92·0	111·0	101·0	80·0	101·0	89·0	106·0
Texas	125·0	86·0	118·0	131·0	102·0	108·0	100·0	115·0
Arkansas	110·0	84·0	116·0	110·0	89·0	101·0	100·0	105·0
Tennessee	105·0	88·0	112·0	115·0	92·0	92·0	95·0	102·0
average	112·0	85·3	113·0	112·0	90·0	101·5	97·0	104·0

The unit of comparison in above is 100, so that 108 is to be understood as 8 per cent increase, 96 as 4 per cent decrease, &c.

CHAPTER VII.

THE PICKING AND MARKETING
OF THE CROP.

Fall estimates must be based on all the facts—Movement of crop may help to remove final doubts—Reasons for planters holding back cotton, how much weight can be given them—Early and late crops, effect on movement—First bloom, first bales and new cotton to September 1—Weeks of small receipts—Difference in date between an early and late crop—Necessities of planters have been a controlling influence, but less so hereafter—Height of rivers and effect on movement—How marketing has been influenced each year since 1870—Daily and monthly receipts and daily percentages for five years.

In what has been already presented, we have the reason pretty clearly developed for the wide differences in fall estimates of the crop. There always will be room for some discrepancy as to the actual yield, because a few of the necessary data may be in dispute. A broad error, however, is a necessity where the estimate is based simply on present appearances; for it is impossible to determine from the apparent condition of the growing plant in any fall month, what the yield of a given field is to be. Acreage, stand, summer growth and fall appearance must all be used in forming a judgment; the first two facts, however, modifying to a considerable extent our interpretation of the others.

But with all our study and observation, when the fall season is reached we shall still have doubts (greatly narrowed, but not removed), which the movement to the ports

alone can dissipate. It becomes important, therefore, to analyze this portion of the problem also, and account for the varying comparative daily percentages, as far as we can do so. Formerly there was more regularity from year to year; but of late seasons there has been an increasing rapidity in the marketing, not, however, with uniform progress. For instance, in 1872-73 half of the port receipts had been received on Jan. 8; in 1873-74, they were half in on Jan. 2; in 1874-75, the date of reaching the same percentage was much earlier, being December 15; and in 1876-77 it was December 8. Yet this irregularity is, in the main, the result of causes which can be explained and understood if the precise situation everywhere could be indicated.

First, however, we would state that little weight can be given to the consideration frequently advanced, that the free movement has, in the past, been disturbed by planters holding back cotton. They have acted in this respect as their interests dictated. Being usually under advances to the factor at high rates of interest, a strong pressure has led them to market their produce as rapidly as possible. This same tendency was increased also by the custom, largely practiced since the war, of paying laborers with a portion of the crop, making necessary quick returns so as to permit the adjustment of accounts and supply the freedmen's wants, which become intensely urgent as the possibility of supplying them approaches. Then, again, while the cotton is on the plantations it is liable to be stolen; and, furthermore, it cannot be insured, and is, therefore, exposed to an absolute loss through fire from accident or malice. Besides all this, no good purpose could be served by holding on, for, if the planter really believed in higher prices for his staple later in the season, he could easily use a portion of the proceeds of his sales in buying futures, a far cheaper and safer way of carrying cotton.

These reasons would seem to be unanswerable, so far as the past is concerned, and yet, changing conditions may, to some extent, eventually reverse this tendency. Planters are every year becoming more independent of the influences which have heretofore forced them to hasten their crop forward. Their cash capital is certainly increasing, and, consequently, not only are the needed supplies, each succeeding year, bought less and less on credit, but the practice of cultivating and picking on shares is passing out of use. The abandonment of the latter custom is accelerated by a disposition among laborers to seek for cash payment. Instances are noted the present season of freedmen even abandoning the crop in which they had an interest, to work for cash. As a class they are very improvident, so that the prospect of future advantage has little power to hold them as against money to supply the wants of the moment. The planter also is each year raising a larger proportion of the food products necessary for the maintenance of his household, and approaching more nearly the true ideal of the Southern farmer of making cotton simply a surplus crop. He is thus becoming, in a measure, independent of the money lender, independent of the laborer, and independent of the grocer, and to that extent acquiring control of the cotton he has raised. We experience too much of the disposition of other agriculturists to doubt that as he may he will hold back his crop for higher prices, notwithstanding the many and obvious benefits of marketing it early. As to the argument growing out of the advantages of buying futures instead of holding cotton, it does not apply in all cases, for very many are on principle opposed to that kind of business, and another large class, more especially the smaller producers, know little about it. These considerations seem to force one to the opinion that, under certain conditions of

the market, it is reasonable to expect, in the near future, that the willingness or unwillingness of the planter to sell, will, to some extent, control the early crop movement.

At present the first positive influence which affects the volume of receipts, is the early or late condition of the plant. Upon this fact depends the movement, to a considerable extent, during one or two months, and, consequently, (other things being equal) the aggregate up to Christmas. There is, however, always a disposition to exaggerate the backwardness of a crop. It is frequently stated that there is a difference of three or four weeks in this respect. The facts, however, would indicate that about two weeks mark the extreme limits between an early and a late season. Of course, this statement refers to the general average in the same district. Some little idea of the situation in this particular may be gathered from a record of the first bloom. We have been able to procure no regular late statistics on this point except the figures kept by the Mobile Prices Current. Some other statements have been published, from time to time, but as they appear to apply to no particular section, but are given as an indication of condition for the whole South, from the Rio Grande to the Potomac, we cannot place any value upon them. At best, the first bloom is but a faint guide, yet taken with other facts, forms a part of the evidence, cumulative in character, which, as a whole, should represent with considerable accuracy, from year to year, the comparative maturity. The Mobile statement is as follows, and applies simply to Alabama or its immediate vicinity :

In 1877, the first bloom was from Sumter county.....	June 9
In 1876, the first bloom was from Marengo county.....	June 9
In 1875, the first bloom was from Monroe county.....	June 8
In 1874, the first bloom was from Lowndes county.....	June 3

In 1873, the first bloom.....	June 11
In 1872, the first bloom.....	June 4
In 1871, the first bloom	June 9
In 1870, the first bloom.....	June 11
In 1869, the first bloom.....	June 13
In 1868, the first bloom.....	June 1
In 1867, the first bloom.....	June 11
In 1866, the first bloom.....	June 23

A mere glance at the above suggests at once defectiveness in a conclusion founded upon it. And yet, such a thought may not do justice to this kind of evidence, for it must be remembered that it applies simply to the district named, and in substance says that the earliest portions of the last three crops there, were on June 8 at about the same stage of growth. This probably was true, inasmuch as the first bale was received at Mobile the present year (1877) on August 11, in 1876 August 13, and in 1875 August 5. Granting this, we must conclude that with the centres of this kind of information multiplied, some very useful facts might be obtained. Our object, however, in introducing it now, is simply to illustrate the little difference in date it indicates between the earliest and latest crops. The extreme, if we omit 1866, is twelve days. But, as already stated, we do not claim for this evidence any great weight. A much better and surer indicator is found in the receipt of first bales and in the arrivals of new cotton up to September 1. We have been at much pains to prepare a statement on these two points for many districts, as only through a multiplication of the centres of observation can we draw any satisfactory conclusions. Complete records have not been kept except in a few cases: as, for instance, at New Orleans by the New Orleans Prices Current, and at Mobile by the Mobile Prices Current. The facts we give, therefore, are derived from various sources, in part from the local newspapers, in part from our own correspondents and from their old letters

which we have on file, and in part from the CHRONICLE reports. The compilation is as follows :

	1871.	1872.	1873.	1874.	1875.	1876.	1877.
Charleston—							
First bale rec'd.	Aug. 15	Aug. 7	Aug. 19	Aug. 13	Aug. 14	Aug. 13	Aug. 21
Where from.....	S. C.	S. C.	S. C.	S. C.	S. C.	S. C.	S. C.
Recv'd to Sept. 1	.....	.....	.....	.....	.....	.....	.....
Augusta—							
First bale rec'd.	Aug. 19	Aug. 10	Aug. 18	Aug. 16	Aug. 1	Aug. 17	Aug. 27
Where from.....	.....	.....	Ga.	Ga.	Ga.	S. C.	S. C.
Recv'd to Sept. 1	275	220	568	226	32	253	117
Atlanta—							
First bale rec'd.	Sept. 4	Sept. 5	Sept. 3	Sept. 11	Aug. 14	Aug. 22	Aug. 28
Where from.....	Ga.	Ga.	Ga.	Ga.	Ga.	Ga.	Ga.
Recv'd to Sept. 1	None.	None.	None.	None.	7	6	3
Savannah—							
First Georgia....	Aug. 6	July 31	Aug. 9	Aug. 6	July 30	Aug. 2	Aug. 7
First Florida....	Aug. 6	July 31	Aug. 10	Aug. 7	Aug. 20	Aug. 2	Aug. 7
Recv'd to Sept. 1	871	1,028	1,254	1,121	396	1,500	227
Macon—							
First bale rec'd.	Aug. 11	Aug. 12	Aug. 19	Aug. 12	July 28	Aug. 2	Aug. 3
Where from.....	Ga.	Ga.	Ga.	Ga.	Ga.	Ga.	Ga.
Recv'd to Sept. 1	20	212	304	195	506	898	113
Columbus, Ga.							
First bale rec'd.	Aug. 17	Aug. —	Aug. 11	Aug. 8	Aug. 10	Aug. 9	Aug. 11
Where from.....	Ga.	Ala.	Ala.	Fla.	Fla.	Ga.	Ala.
Recv'd to Sept. 1	.....	124	67	74	51	156	72
Montgomery—							
First bale rec'd.	Aug. 11	Aug. 6	Aug. 14	Aug. 11	Aug. 4	Aug. 12	Aug. 10
Where from.....	Ala.	Ala.	Ala.	Ala.	Ala.	Ala.	Ala.
Recv'd to Sept. 1	287	217	288	190	247	216	304
Mob..e—							
First bale rec'd.	Aug. 12	Aug. 7	Aug. 16	Aug. 12	Aug. 5	Aug. 13	Aug. 11
Where from.....	Ala.	Ala.	Ala.	Ala.	Ala.	Ala.	Ala.
Recv'd to Sept. 1	40	251	47	175	212	111	58
New Orleans—							
First Texas.....	.....	July 10	July 10	July 13	July 13	July 10	July 10
First Miss. Val	July 27	Aug. 4	Aug. 12	Aug. 12	July 13	Aug. 4	Aug. 10
Recv'd to Sept. 1	22	1,611	71	320	342	429	419
Shreveport—							
First bale rec'd.	.....	Aug. 21	Aug. 19	Aug. 13	Aug. 7	Aug. 6	Aug. 9
Where from.....	.....	La.	La.	La.	La.	La.	La.
Recv'd to Sept. 1	.....	41	9	38	66	40	56
Vicksburg—							
First bale rec'd	.....	.....	.....	.....	.....	Aug. 14	Aug. 14
Where from.....	.....	.....	.....	.....	.....	Miss.	Miss.
Recv'd to Sept. 1	.....	.....	.....	.....	.....	38	46

	1871.	1872.	1873.	1874.	1875.	1876.	1877.
Col'bus, Miss.—							
First bale rec'd.	Aug. 8	Aug. 29	Aug. 21	Aug. 28	Aug. 17	Aug. 24	
Where from.	Miss.	Miss.	Miss.	Miss.	Miss.	Miss.	
Recv'd to Sept. 1							
Nashville—							
First bale rec'd.	Aug. 22	Aug. 22	Aug. 15	Sept. 3	Aug. 30	Sept. 4	
Where from.	Tenn.	Tenn.	Tenn.	Tenn.	Tenn.	Tenn.	
Recv'd to Sept. 1				None.	1	None.	
Memphis—							
First bale rec'd.	Aug. 3	Aug. 16	Aug. 22	Aug. 12	Aug. 23	Sept. 1	
Where from.	Ark.	Ala.	Miss.	Miss.	Ark.	Miss.	Miss.
From Tenn.	Aug. 23			Aug. 12			
Recv'd to Sept. 1	20	75		28	86	48	1
Galveston—							
First bale rec'd.	July 21	July 16	July 10	July 9	July 16	July 7	July 13
Where from.	Rio G.	Rio G.	Rio G.	Rio G.	Rio G.	Rio G.	Rio G.
Recv'd to Sept. 1	1,967	7,975	1,989	2,706	6,218	5,282	1,051

To bring the results before us more distinctly, we have also classified and separated the above by first grouping together the dates of the arrivals of first bales, and after that the arrivals of new cotton to September 1.

	Date of Receipt of First Bale.						
	1871.	1872.	1873.	1874.	1875.	1876.	1877.
S. Carolina—							
Charleston ...	Aug. 15	Aug. 7	Aug. 19	Aug. 13	Aug. 14	Aug. 13	Aug. 21
Georgia—							
Augusta.	Aug. 19	Aug. 10	Aug. 18	Aug. 16	Aug. 1	Aug. 17	Aug. 27
Atlanta.	Sept. 4	Sept. 5	Sept. 3	Sept. 14	Aug. 14	Aug. 22	Aug. 28
Savannah—							
From Ga.	Aug. 6	July 31	Aug. 9	Aug. 6	July 30	Aug. 2	Aug. 7
" Fla.	Aug. 6	July 31	Aug. 10	Aug. 7	Aug. 20	Aug. 2	Aug. 7
Macon.	Aug. 11	Aug. 12	Aug. 19	Aug. 12	July 28	Aug. 2	Aug. 3
Columbus.	Aug. 17	Aug. —	Aug. 11	Aug. 8	Aug. 10	Aug. 9	Aug. 11
Alabama—							
Montgomery.	Aug. 11	Aug. 6	Aug. 14	Aug. 11	Aug. 4	Aug. 12	Aug. 10
Mobile.	Aug. 12	Aug. 7	Aug. 16	Aug. 12	Aug. 5	Aug. 13	Aug. 11
Louisiana—							
New Orleans—							
From Texas.	July 10	July 10	July 10	July 13	July 13	July 10	July 10
" Miss. Val.	July 27	Aug. 4	Aug. 12	Aug. 12	July 13	Aug. 4	Aug. 10
Sareveport.		Aug. 21	Aug. 19	Aug. 13	Aug. 7	Aug. 6	Aug. 9
Mississippi—							
Vicksburg.						Aug. 14	Aug. 14
Columbus.		Aug. 8	Aug. 29	Aug. 21	Aug. 28	Aug. 17	Aug. 24
Tennessee—							
Nashville.		Aug. 22	Aug. 22	Aug. 15	Sept. 3	Aug. 30	Sept. 4
Memphis.	Aug. 23	Aug. 16	Aug. 22	Aug. 12	Aug. 23	Aug. 23	Sept. 1
Texas—							
Galveston.	July 21	July 16	July 10	July 9	July 16	July 7	July 13

This statement would indicate that the earliest portion in each section of the present crop was about a week later

than last year's crop, and from one to two weeks later than that of the previous year. The arrivals of new cotton to September 1, were as follows for the years named :

ARRIVALS OF NEW COTTON TO SEPT. 1.

	1871.	1872.	1873.	1874.	1875.	1876.	1877.
Augusta, Ga.	275	220	568	226	32	253	117
Atlanta, Ga.	None.	None.	None.	None.	7	6	3
Savannah, Ga.	771	1,028	1,254	1,421	396	1,500	227
Macon, Ga.	20	212	304	195	506	898	113
Columbus, Ga. ....	.....	124	67	74	51	156	72
Montgomery, Ala.	287	217	288	190	247	216	304
Mobile, Ala.	40	251	47	175	212	114	58
New Orleans, La.	22	1,641	71	320	342	429	419
Shreveport, La. ....	.....	41	9	38	66	40	56
Vicksburg, Miss. ....	.....	.....	.....	.....	.....	38	46
Nashville, Tenn. ....	.....	.....	.....	.....	.....	1	None.
Memphis, Tenn.	20	75	.....	28	86	48	1
Galveston, Tex.	1,967	5,975	1,989	2,706	6,218	5,282	1,051
Total all ports to Sept. 1.	3,402	9,784	4,597	5,373	8,163	8,981	2,467

This statement gives us a total of new cotton at all these points of 2,467 bales to September 1, this year, against 8,981 bales to the same day in 1876, and 8,163 bales in 1875, which is simply corroborative of the conclusions drawn from the previous table. Still another means for obtaining an indication on the same question is by a comparison of the weeks of smallest receipts at the ports, as we have done in the following :

WEEKS OF SMALLEST RECEIPTS FOR YEARS NAMED.

Year.	Week ending—	Quantity received.
In 1879, smallest receipts were.	August 18	5,287
In 1871, smallest receipts were.	August 18	7,630
In 1872, smallest receipts were.	August 8	1,178
In 1873, smallest receipts were.	August 29	8,237
In 1874, smallest receipts were.	August 14	4,054
In 1875, smallest receipts were.	August 13	1,541
In 1876, smallest receipts were.	August 4	5,153
In 1877, smallest receipts were.	August 17	1,733

One fact appears to be brought out by all these comparisons, and that is that the extreme difference between an early and a late crop is about two weeks. Still, the effect on the receipts of even ten days' difference is very considerable, showing itself through many weeks. The

following statement of September percentages in a measure illustrates this.

SEPTEMBER PERCENTAGES OF TOTAL PORT RECEIPTS.

Day of Month.	1872.	1873.	1874.	1875.	1876.
1.....	S.	00:04	00:03	00:02	00:05
2.....	00:11	00:08	00:06	00:05	00:09
3.....	00:15	00:13	00:11	00:10	S.
4.....	00:22	00:17	00:16	00:13	00:10
5.....	00:28	00:23	00:22	S.	00:23
6.....	00:39	00:27	S.	00:22	00:36
7.....	00:47	S.	00:32	00:30	00:44
8.....	S.	00:36	00:38	00:37	00:53
9.....	00:64	00:42	00:43	00:46	00:65
10.....	00:78	00:47	00:51	00:55	S.
11.....	00:91	00:53	00:60	00:63	00:88
12.....	01:01	00:61	00:69	S.	00:99
13.....	01:21	00:68	S.	00:80	01:19
14.....	01:33	S.	00:86	00:95	01:34
15.....	S.	00:81	01:00	01:08	01:53
16.....	01:58	00:91	01:12	01:21	01:72
17.....	01:92	01:01	01:23	01:36	S.
18.....	02:11	01:12	01:41	01:49	02:06
19.....	02:32	01:27	01:60	S.	02:32
20.....	02:58	01:35	S.	01:70	02:58
21.....	02:82	S.	01:90	01:86	02:82
22.....	S.	01:50	02:08	02:05	03:12
23.....	03:14	01:76	02:30	02:25	03:46
24.....	03:55	01:89	02:49	02:49	S.
25.....	03:78	02:07	02:74	02:73	03:95
26.....	04:04	02:27	02:99	S.	04:28
27.....	04:39	02:45	S.	03:14	04:65
28.....	04:65	S.	03:36	03:44	05:00
29.....	S.	02:74	03:56	03:73	05:49
30.....	05:06	03:03	03:84	04:03	05:87

The foregoing percentages would furnish, as the month closes, an expression of the relative maturity of the different crops, were it not that other conditions coming in sensibly affect the movement to the ports. Prominent among these we may mention the character of the picking season, which begins early to exert an influence, and may finally become a very important consideration. This has been the case this fall, and the same agencies were also active as an obstructive force in the year of 1875, when the crop was generally early. Very excessive rains both seasons cut out so many picking days, that every fair moment was of necessity devoted to gathering and housing the cotton, to the neglect of ginning and baling. This disposition of the planter is decidedly increased in case the crop is a late one; for in that event general pick-

ing has of course to begin late, and a subsequent loss of days by rain or otherwise, must compel a more eager improvement of what is left, to the exclusion of other work. On the other hand, with the crop early and the picking season fine, the labor on the farm proceeds in a regular routine, without interruption, and, other things being equal, the movement to the ports will be rapid.

Another important consideration affecting the receipts is the height of the water in the navigable streams of the Southwest. Formerly this was a point of very decided consequence. But the great expansion in the railroad net work since the war has made it a less controlling influence. Still, even at the present time there are extensive regions having no means of marketing their cotton other than the navigable rivers and bayous. After a very dry summer, many of these streams, including at times some of the larger ones, fall so low that the smallest steamboats cannot navigate them, and they remain in this condition for weeks. The planters and factors who are dependent upon them have no alternative but to wait until the autumn rains cause a rise of water. It often happens, however, that navigation remains suspended or obstructed during all or most of the winter; in such instances the spring rains give those sections their earliest relief, rendering possible then for the first time the marketing of their reserves of cotton. It becomes very necessary, therefore, for the observer to know the condition of these rivers each season. Very little, however, can be learned on this point, except by comparison with previous seasons. We have, therefore, compiled the following from the monthly reports of the Signal Service Bureau. It will be noticed that we include the data for points on the Upper Mississippi and Missouri rivers; this is done principally for comparison when future floods threaten.

HEIGHT OF RIVERS ABOVE LOW WATER DURING YEAR 1874.

STATIONS.	January			Febr'			March			April			May			June			July			August			Sept.			Oct.			Nov.			Dec.		
	Date.	Feet.	Inch.	Date.	Feet.	Inch.	Date.	Feet.	Inch.	Date.	Feet.	Inch.	Date.	Feet.	Inch.	Date.	Feet.	Inch.	Date.	Feet.	Inch.	Date.	Feet.	Inch.	Date.	Feet.	Inch.	Date.	Feet.	Inch.	Date.	Feet.	Inch.			
<i>Red River.</i>																																				
Shreveport { Highest.	1 21 11	18	22	9	31	27	7	30	30	3	1 30	3	1 30	3	1 24	1	14	14	3	1 6	6	30	6	9	20	11	3	1 9	6	31	12	4	8			
Shreveport { Lowest.	25 11 5	1 16	9	1 22	10	15	25	5	21	23	2	30	11	2	30	11	2	31	6	10	31	1	9	6	1	2	2	6	11	19	4	7	1	2		
<i>Missouri.</i>																																				
Leavenworth { Highest.	6 4 6	3	4	25	5	3	25	3	11	25	3	9	17	10	0	9	8	7	27	3	9	1	0	30	0	6	1	0	6	1	0	13	10			
Leavenworth { Lowest.	20 0 1	21	1	9	17	0	3	18	0	4	9	1	4	3	11	31	3	4	25	1	0	30	0	6	11	0	6	30	3	0	21	3	3			
<i>Mississippi.</i>																																				
Davenport. { Highest.	6 10	8	4	7	6	9	15	7	30	7	0	16	8	2	11	7	0	19	7	2	1	3	9	29	4	1	12	5	4	23	4	6	18			
Davenport. { Lowest.	4 5 7	25	5	10	31	5	3	18	4	5	31	6	0	21	4	7	31	4	0	26	1	8	1	1	10	31	3	2	30	2	3	3	0	7		
Keokuk. { Highest.	21 4 2	1	3	5	12	9	6	1	7	8	19	8	3	18	7	9	21	7	3	1	4	11	27	4	7	11	5	5	25	4	8	1	3	2		
Keokuk. { Lowest.	2 2 0	12	1	7	2	2	19	5	5	31	6	6	23	5	6	31	5	2	26	2	1	1	2	4	31	3	8	4	3	4	1	1	4			
St. Louis. { Highest.	26 15 3	1	12	2	11	7	24	18	11	7	17	5	20	18	5	13	11	1	11	4	29	11	1	8	10	23	7	6	1	7	8	1	7	8		
St. Louis. { Lowest.	19 4 2	12	8	4	2	10	6	18	13	1	28	13	5	6	11	0	31	11	7	29	6	6	12	6	31	7	0	10	3	31	3	4	4			
Cairo. { Highest.	31 31 0	28	42	6	11	15	5	27	47	4	1	45	8	22	18	4	1	13	7	7	12	0	5	13	5	1	7	10	30	12	1	31	16	11		
Cairo. { Lowest.	26 21 6	13	21	8	22	36	3	7	33	4	30	14	8	10	10	10	3	30	6	9	20	3	4	31	4	5	10	3	0	16	3	0	17	6		
Memphis. { Highest.	8 27 0	15	15	11	1	31	10	6	31	10	31	14	0	24	14	8	1	11	10	10	9	8	3	10	0	4	5	10	30	6	9	31	9	11		
Memphis. { Lowest.	26 31 6	12	36	0	31	43	0	30	45	8	1	45	8	1	42	8	1	8	6	29	4	3	23	3	2	31	3	9	16	1	11	21	4	11		
Vicksburg. { Highest.	11 17 8	21	29	0	2	37	7	6	13	0	31	43	1	30	22	3	31	12	1	14	12	10	13	11	8	8	9	0	30	6	1	10	11	3		
Vicksburg. { Lowest.	4 1 9	13	4	0	31	1	1	15	40	7	2	1	6	1	2	7	1	6	8	14	12	6	4	12	2	9	13	0	18	14	0	19	13	6		
N. Orleans { Highest.	17 9 4	1	5	8	1	4	6	30	1	8	26	2	7	30	9	6	31	12	3	31	13	5	3	15	0	28	15	4	25	15	8	1	15	5		
<i>Camdenland.</i>																																				
Nashville. { Highest.	11 32 6	23	37	6	25	38	0	16	49	2	1	34	2	6	3	13	5	0	32	18	3	1	16	0	1	9	2	26	19	9	31	21	11			
Nashville. { Lowest.	2 3 2	0	6	13	0	18	8	1	12	2	31	3	6	30	1	4	8	1	0	22	1	2	25	1	7	15	1	8	7	1	4	19	3	10		
<i>Ohio.</i>																																				
Pittsburg. { Highest.	8 23 3	24	14	6	7	12	8	29	17	1	1	13	2	14	6	0	30	7	5	10	5	10	30	3	3	1	6	1	25	9	0	30	20	0		
Pittsburg. { Lowest.	1 3 11	8	4	4	18	5	0	15	0	1	31	4	0	30	1	9	8	1	0	21	1	11	19	0	3	31	0	8	5	0	3	13	4	7		
Cincinnati { Highest.	11 47 11	26	14	2	1	37	1	30	45	0	1	46	0	31	12	6	2	15	0	4	7	6	5	8	6	30	14	10	31	25	1	19	5	5		
Cincinnati { Lowest.	3 11 8	13	16	1	31	17	8	8	18	8	31	9	1	30	6	1	9	3	8	2	5	0	23	2	3	31	3	9	12	2	11	19	9	5		
Louisville. { Highest.	13 25 0	27	22	6	1	18	6	30	19	2	3	22	9	22	5	4	28	6	8	4	7	6	4	10	7	4	11	30	7	6	31	9	10			
Louisville. { Lowest.	4 6 5	13	18	2	18	8	2	2	8	2	6	31	4	8	14	4	3	11	3	2	30	3	9	24	2	1	5	2	4	3	2	3	20	5	10	

* Below high-water mark.

† Above high-water mark.

‡ Below bench mark.

* Below high-water mark.

† Above high-water mark.

‡ Below bench mark.

HEIGHT OF RIVERS ABOVE LOW WATER DURING YEAR 1875.

STATIONS.	January		Febr'y.		March.		April.		May.		June.		July.		August.		Sept.		Oct.		Nov.		Dec.	
	Date.	Inch.	Date.	Inch.	Date.	Inch.	Date.	Inch.	Date.	Inch.	Date.	Inch.	Date.	Inch.	Date.	Inch.	Date.	Inch.	Date.	Inch.	Date.	Inch.	Date.	Inch.
<i>Red River.</i>																								
Shreveport { Highest.	18 21	2	14 22	0	31 24	1	22 28	4	1 26	4	26 22	9	1 19	5	17 18	1	19 18	7	1 14	6	1 6	7	31 12	6
Shreveport { Lowest.	1 13	6	3 18	2	12 17	6	1 24	7	31 17	7	1 17	5	30 11	3	1 11	6	30 14	6	29 6	9	29 21	6	1 2	11
<i>Missouri.</i>																								
Leavenworth { Highest.	1 33	3	.....	.....	31 9	7	30 17	3	1 16	9	29 16	2	5 16	1	1 12	5	7 13	2	1 8	6	1 6	10	26	5
Leavenworth { Lowest.	.....	.....	.....	.....	15 4	6	5 7	6	28 10	7	1 10	10	27 12	0	24 8	0	29 8	6	25 3	7	20 5	2	2	3
<i>Mississippi.</i>																								
Davenport { Highest.	5 9	5	1 5	3	29 12	8	29 12	11	1 12	8	1 8	0	6 7	11	1 2	5	17 7	0	1 4	8	10 3	0	20 8	3
Davenport { Lowest.	1 2	11	12 3	11	28 3	9	14 7	10	31 8	2	10 6	10	31 2	9	31 1	0	1 1	0	25 2	2	27 0	2	6 1	2
Knox { Highest.	5 9	1	.....	.....	31 9	1	30 12	3	2 12	10	8 9	13	8	1	1 6	0	10 12	8	1 6	8	9 3	10	31 4	8
Knox { Lowest.	1 1	3	.....	.....	10 4	6	17 9	7	31 9	0	13 7	6	28 5	7	28 2	0	1 2	0	26 3	7	30 1	1	19 0	9
St. Louis { Highest.	18 7	1	27 9	1	16 12	4	.....	.....	3 24	7	30 21	0	11 28	11	3 29	11	14 10	6	1 14	6	16 8	4	25 7	4
St. Louis { Lowest.	3 2	9	20 4	4	10 5	1	.....	.....	31 16	4	1 16	4	28 20	2	28 11	0	1 1	6	31 8	2	30 5	3	5 3	1
Cairo { Highest.	8 24	7	8 27	6	21 43	8	1 40	2	6 37	6	30 28	11	31 41	5	7 45	3	24 15	10	1 14	4	30 21	10	31 23	3
Cairo { Lowest.	24 5	4	24 11	7	1 27	7	28 21	7	31 20	0	4 17	5	3 17	5	31 13	10	13 9	7	31 7	11	3 5	16	24 13	1
Memphis { Highest.	10 18	11	10 22	7	28 33	9	1 33	10	10 29	0	30 21	11	31 32	6	15 34	0	27 19	5	1 13	7	30 16	4	31 19	9
Memphis { Lowest.	27 4	0	27 8	5	1 11	6	30 19	4	31 16	11	6 14	4	1 22	4	31 15	3	9 10	11	31 5	16	9 5	2	24 11	4
Vicksburg { Highest.	14 25	0	15 29	10	30 41	5	21 43	0	1 41	10	1 34	10	31 38	6	24 10	11	1 40	4	1 22	1	30 16	0	10 25	0
Vicksburg { Lowest.	1 8	1	1 9	0	4 16	8	1 41	10	31 35	7	26 26	0	1 28	11	1 38	8	17 7	8	31 9	8	13 8	0	1 16	9
N. Orleans { Highest.	16 10	6	17 8	3	31 4	11	22 4	0	9 4	1	5 5	1	31 6	4	30 4	10	1 5	0	5 8	10	30 12	8	29 10	3
N. Orleans { Lowest.	1 14	3	1 13	11	4 19	11	3 5	1	31 5	2	28 8	7	1 8	5	1 6	3	21 9	1	31 14	4	16 14	10	1 13	0
<i>Cumberland.</i>																								
Nashville { Highest.	31 10	0	1 40	8	2 11	4	30 29	11	3 34	0	23 7	7	19 29	7	7 15	6	21 15	0	7 10	2	28 21	11	31 28	0
Nashville { Lowest.	23 5	3	23 9	3	14 18	10	22 7	6	31 4	0	6 3	2	2 6	3	31 3	3	13 1	6	29 2	5	1 2	5	23 6	5
<i>Ohio.</i>																								
Pittsburg { Highest.	1 10	5	27 12	11	16 20	6	3 18	0	4 7	0	12 5	2	21 13	7	3 21	0	22 3	9	13 5	11	25 13	6	28 21	0
Pittsburg { Lowest.	12 3	0	22 2	0	11 6	8	28 5	5	23 3	8	22 7	6	7 2	7	31 1	2	10 0	4	2 1	6	1 3	2	20 2	7
Cincinnati { Highest.	3 33	3	28 38	2	1 12	1	7 36	8	1 24	4	22 17	0	25 37	10	6 55	5	1 8	8	19 9	11	29 20	10	30 47	0
Cincinnati { Lowest.	17 8	9	20 9	6	28 23	8	29 15	4	30 8	1	1 8	8	1 12	3	31 29	7	1 4	18	4	6	3	1	23 1	0
Louisville { Highest.	4 13	0	25 12	10	21 18	0	8 13	6	3 11	3	23 7	10	30 17	7	7 29	7	1 5	8	20 5	19	28 13	1	31 21	7
Louisville { Lowest.	21 4	1	22 5	9	29 9	9	30 7	0	31 5	11	1 4	10	1 7	0	31 6	0	22 3	0	14 4	1	4 3	10	24 7	1

* Below bench mark. † Below high-water mark.

HEIGHT OF RIVERS ABOVE LOW WATER DURING YEAR 1876.

STATIONS.		January.		February.		March.		April.		May.		June.		July.		August.		Sept.		Oct.		Nov.		Dec.										
Date.	Feet.	Date.	Feet.	Date.	Feet.	Date.	Feet.	Date.	Feet.	Date.	Feet.	Date.	Feet.	Date.	Feet.	Date.	Feet.	Date.	Feet.	Date.	Feet.	Date.	Feet.	Date.	Feet.									
<i>Red River.</i>																																		
Shreveport { Highest	30 25	3	9 26	0	31 21	8	10 29	0	8 22	11	4	16	0	28 29	5	1 28	6	1 11	4	1	7	2	30	6	6	1	6	9						
Shreveport { Lowest	1 12	9	29 18	0	11 15	6	30 20	7	31 15	9	30	11	2	6 10	2	31 11	7	30	7	4	30	3	9	13	2	8	4	0						
<i>Missouri.</i>																																		
Leavenworth { Highest	19 6	6	24 5	8	29 9	12	16 14	9	31 12	2	30	15	9	6 16	5	1 11	3	15	11	0	1	8	4	27	4	9	*							
Leavenworth { Lowest	11 3	6	17 4	7	5 4		1 9	10	25	9	1	4	11	9	34	11	3	17	9	1	22	6	9	27	4	9	*							
<i>Mississippi.</i>																																		
Davenport { Highest	5 5	5	6 8	0	19 10	0	16 13	9	9 13	1	1	13	0	8 10	5	31	3	10	15	6	11	2	4	4	12	3	7	*						
Davenport { Lowest	12 1	6	21 1	6	2 9	2	17 17	3	19 10	10	27	7	6	29	3	19	2	6	30	4	3	29	2	10	2	9	*							
Keokuk . . .	16 2	10	1 1	4	1 3	10	2	8	1	24	12	1	30	9	7	31	5	2	15	3	4	5	24	3	11	1	7	1	11					
St. Louis . .	7 17	6	17 13	1	31 22	11	20 29	3	10 32	6	27	27	7	7 30	1	1	16	11	16	22	3	1	14	9	19	3	9	9	6	9	11	2		
St. Louis . .	2 7	1	7 5	0	1 9	4	13 22	6	31 19	5	2	19	7	31 17	6	1	19	2	23	10	1	22	3	6	13	4	2	12	4	2	4	3	4	
St. Louis . .	31 13	9	4 15	3	31 15	8	6 16	5	14 42	2	1	32	2	9	31	2	1	20	10	3	11	5	24	7	10	1	9	0	30	0	3	4	3	
St. Louis . .	17 20	1	29 31	5	9 19	1	30 37	1	31 26	4	15	21	6	31	20	10	3	11	10	3	13	5	24	7	10	1	9	0	30	0	3	4	3	
St. Louis . .	31 31	9	10 33	11	31 34	2	7 35	0	18 33	8	23	22	5	18	28	4	1	19	8	23	18	6	1	17	11	9	10	4	9	2	4	1	1	
St. Louis . .	12 10	1	1 32	0	11 46	5	30 33	6	31 20	7	16	18	1	31	20	6	1	13	0	5	11	29	7	0	3	7	9	31	2	1	2	1	1	
St. Louis . .	31 28	11	29 42	3	1 12	3	39	44	3	10	44	10	1	1	20	40	0	1	38	2	28	25	7	0	6	25	0	14	11	5	9	13	4	
St. Louis . .	1 20	8	1 39	1	18 38	10	1 42	0	3 24	6	2	21	37	10	3	38	3	1	4	11	3	34	11	6	1	11	5	31	3	11	3	11	3	11
St. Louis . .	31 5	4	27 1	1	27 3	6	29	3	1	8	24	6	2	2	3	31	2	1	9	9	9	5	11	5	31	11	8	11	3	8	11	3	8	
St. Louis . .	2 10	3	3 5	2	3 4	2	4	3	11	3	3	4	30	5	6	29	9	18	11	9	31	1	30	14	4	30	16	2						
<i>Cumberland.</i>																																		
Nashville { Highest	29 31	6	18 26	7	30 32	5	1 28	10	11 16	2	2	18	8	29	16	0	6	11	7	2	5	25	5	11	27	5	2	1	3	10				
Nashville { Lowest	16 8	1	29 9	11	9 7	4	26	7	9 27	6	6	21	4	0	18	3	2	31	2	7	20	1	19	0	10	16	1	2	22	2	0			
<i>Ohio.</i>																																		
Pittsburg . .	25 11	6	12 17	6	17 12	6	15 13	5	19 8	11	29	4	8	17	6	8	1	1	9	19	20	9	1	5	10	22	8	9	1	4	9			
Pittsburg { Highest	29 21	9	2 15	4	31 10	6	1 39	10	23 21	6	1	15	9	7	15	6	18	19	0	23	31	0	3	1	5	10	22	8	9	1	4	9		
Pittsburg { Lowest	9 5	4	26 5	7	5 11	26	5	5	31	10	11	1	8	1	1	31	0	3	3	0	3	2	2	2	2	2	2	2	2	2	2	2	2	2
Cincinnati { Highest	29 31	0	1 23	0	31 16	3	27 17	16	12 13	6	20	6	4	31	8	4	31	8	4	31	8	4	31	8	4	31	8	4	31	8	4	31	8	4
Cincinnati { Lowest	12 16	0	29 17	11	40 16	3	27 17	16	12 13	6	20	6	4	31	8	4	31	8	4	31	8	4	31	8	4	31	8	4	31	8	4	31	8	4
Louisville . .	29 31	0	1 23	0	31 16	3	27 17	16	12 13	6	20	6	4	31	8	4	31	8	4	31	8	4	31	8	4	31	8	4	31	8	4	31	8	4
Louisville { Highest	29 31	8	29 8	7	4 7	11	28	8	5	11 7	1	23	4	6	27	5	1	5	1	6	1	9	2	6	1	9	2	6	1	9	2	6	1	9
Louisville { Lowest	13 8	2	29 8	7	4 7	11	28	8	5	11 7	1	23	4	6	27	5	1	5	1	6	1	9	2	6	1	9	2	6	1	9	2	6	1	9

* River frozen during all or part of the month. † Below high-water mark.

HEIGHT OF RIVERS ABOVE LOW WATER DURING YEAR 1877.

STATIONS.	January			February			March			April			May			June			July			August			Sept.			Oct.			Nov.			Dec.		
	Date.	Feet.	Inch.	Date.	Feet.	Inch.	Date.	Feet.	Inch.	Date.	Feet.	Inch.	Date.	Feet.	Inch.	Date.	Feet.	Inch.	Date.	Feet.	Inch.	Date.	Feet.	Inch.	Date.	Feet.	Inch.	Date.	Feet.	Inch.	Date.	Feet.	Inch.			
<i>Red River.</i>																																				
Shreveport { Highest.	31 11	8	27 19	9	1 20	1	30 25 11	11 27	3	23 21	7	1 19 11	1 11	2	31 3	6	30 3	4	31 16	4	17 23	3	7 24	1												
Shreveport { Lowest.	1 4	5	1 11	8	31 16 10	1 14 10	31 21	0	14 19	6	31 11	7	31	3	6	30 3	4	15	2	6	1 17	5	2 20	8												
<i>Missouri.</i>																																				
Leavenworth { Highest.	*	*	9 10 10	0	9	0	8 15	2	31 17	3	13 19	8	3 18	7	1 11	9	1	8	6	23	7	10	6	8	29	6	1									
Leavenworth { Lowest.	*	*	16 7	4	13	5	9	1	8	8	25 15	10	31 12	0	31	8	7	30	6	0	31	8	7	17	3	10										
<i>Mississippi.</i>																																				
Davenport { Highest.	*	*	23	4	10	31	4	10	4	9 11	4	6	3	25	6	0	20	6	0	1	3	6	4	1	6	29	3	2								
Davenport { Lowest.	*	*	26	3	10	8	2	2	18	5	2	30	4	1	4	0	31	3	10	28	0	9	15	0	6	1	1	0								
Kookuk { Highest.	*	*	16	12	8	31	6	0	9	12	4	17	10	6	21	11	7	1	10	11	1	5	3	1	5	1	26	4	8							
Kookuk { Lowest.	*	*	28	1	7	16	2	8	18	7	2	31	4	3	1	6	2	31	5	2	26	1	10	28	0	11	1	0	9							
St. Louis { Highest.	8 11	6	3 15	0	33	13	10	21	23	6	14	26	7	4	26	6	1	15	9	14	11	1	29	12	10	28	13	10	31	16	9	5				
St. Louis { Lowest.	29 9	1	1 9	7	18	7	10	1 11	0	31	19	9	1	20	3	31	16	1	30	9	8	30	7	1	4	6	10	15	9	7	9	5				
Cairo { Highest.	27 37	0	1 31	7	31	31	1	11	10	7	1	38	2	19	31	1	2	20	4	1	17	1	4	30	19	1	31	21	4							
Cairo { Lowest.	1 1	1	28	12	11	7	11	9	1	32	1	31	23	2	2	21	2	31	18	1	28	6	10	30	5	5	11	3	5							
Memphis { Highest.	31 29	8	1 29	3	21	21	7	29	33	0	1	32	9	21	26	4	4	21	0	1	14	3	10	6	6	11	7	11	30	12	6	31	16	10		
Memphis { Lowest.	3 0	10	28	10	6	7	9	1	1	21	2	31	21	9	1	10	9	1	39	7	1	25	5	1	1	23	3	1	11	3	2	6	7	11	23	
Vicksburg { Highest.	31 33	6	5	36	2	31	32	0	30	41	2	9	41	9	1	40	9	1	39	7	1	25	5	1	1	23	3	1	1	1	1	30	20	1	10	
Vicksburg { Lowest.	7 2	1	28	19	7	11	14	10	1	32	11	31	40	10	10	37	1	31	25	6	31	11	4	1	18	11	6	2	11	2	20	11	1	13		
N. Orleans { Highest.	31 8	8	8	7	2	31	11	12	4	1	7	1	3	7	1	3	7	1	4	4	1	7	8	11	6	2	11	2	20	11	1	13	8	3		
N. Orleans { Lowest.	2 15	10	28	9	9	11	12	4	1	7	2	4	6	26	4	6	31	7	6	30	13	7	12	14	1	16	14	6	6	13	2	1	11	3		
<i>Cumberland.</i>																																				
Nashville { Highest.	22 40	4	8	10	0	26	19	9	11	31	4	1	23	2	7	10	9	2	6	0	1	3	5	18	4	11	20	2	1	30	14	4	1	13	6	
Nashville { Lowest.	1 2	7	28	3	10	1	3	9	6	11	1	31	3	4	7	2	4	16	2	4	30	2	1	1	1	20	1	1	1	1	1	5	23	3	2	
<i>Ohio.</i>																																				
Pittsburg { Highest.	17 21	6	3	12	9	10	16	6	4	9	3	11	7	9	8	3	5	7	7	1	3	10	19	1	11	26	6	27	6	27	18	2	7	13	4	
Pittsburg { Lowest.	31	5	22	3	5	2	4	2	28	4	9	31	2	0	3	1	7	18	1	6	31	1	5	30	10	4	32	0	7	23	12	1	29	3	1	
Cincinnati { Highest.	20 53	9	8	31	7	30	41	4	1	39	3	9	27	2	23	16	9	10	17	11	6	8	5	9	30	8	19	31	9	1	26	31	9	1		
Cincinnati { Lowest.	7 10	8	28	9	10	1	9	10	19	16	10	31	9	10	5	7	31	7	6	20	4	0	6	3	9	37	5	5	6	5	11	29	10	1	1	
Louisville { Highest.	21 30	0	9	11	3	31	16	5	1	15	8	10	10	10	24	8	5	11	8	1	5	2	1	1	5	2	12	4	1	31	4	9	30	11	8	
Louisville { Lowest.	5 1	2	28	5	11	2	5	10	19	8	1	31	5	10	1	5	5	2	21	5	0	23	2	11	7	2	10	8	2	6	8	4	0	23	6	
Frozen during all or part of the month. † Receded from gauge. ‡ Below high-water mark. § Below bench mark. || Below zero of gauge.																																				

* Frozen during all or part of the month. † Receded from gauge. ‡ Below high-water mark. § Below bench mark. ¶ Below zero of gauge.

The foregoing tables show the position of the rivers named for the past four years. The object for including the northern stations was, as stated above, that our readers may have in their possession the condition of the rivers in those districts at times of previous floods, so as to be able to judge better of any future similar conditions. As we are, however, now considering the influences affecting the movement of the crop during the fall months, the principal facts from these tables which shed light on that point for that period may be usefully brought together for comparison.

HEIGHT RIVERS ABOVE LOW WATER, OCTOBER TO DECEMBER, 1873-77.

STATIONS.	October.				November.				December.			
	High'st	Lowest			High'st	Lowest			High'st	Low't.		
	Ft. In.	Ft. In.			Ft. In.	Ft. In.			Ft. In.	Ft. In.		
<i>Mississippi.</i>												
St. Louis.....	1877....	12 10	6 10		13 10	9 9			16 9	9 5		
	1876....	14 9	9 6		13 3	9 9			14 2	6 9		
	1875....	14 0	8 2		8 4	5 3			7 4	3 11		
	1874....	8 10	7 0		7 6	6 3			7 8	3 4		
	1873....	7 5	6 3		8 6	4 8			16 4	4 6		
Cairo.....	1877....	11 4	3 5		19 1	10 4			24 4	14 4		
	1876....	22 3	7 10		13 4	9 0			12 4	0 3		
	1875....	14 4	7 11		21 10	5 10			29 3	13 1		
	1874....	7 10	4 5		12 1	3 0			16 11	6 10		
	1873....	6 0	3 8		14 9	6 6			34 6	14 5		
Memphis.....	1877....	7 11	3 2		12 6	7 11			16 10	10 2		
	1876....	17 11	7 0		10 10	7 9			9 2	2 1		
	1875....	13 7	5 10		16 4	5 2			19 9	11 4		
	1874....	5 10	3 9		6 9	1 11			9 11	4 11		
	1873....	3 0	2 1		8 7	2 4			27 0	8 2		
Vicksburg.....	1877....	†	†		20 1	10 11			26 5	19 7		
	1876....	25 0	11 6		14 5	11 5			13 1	3 11		
	1875....	22 1	9 8		16 0	8 0			25 0	16 9		
	1874....	9 0	5 6		6 1	3 0			11 3	6 6		
	1873....	5 0	2 7		10 10	2 11			35 5	6 6		
New Orleans..	1877*....	11 2	14 6		11 1	13 2			8 8	11 3		
	1876*....	9 5				11 4			13 8	16 2		
	1875*....	8 10	14 4		12 8	11 10			10 3	13 10		
	1874*....	13 0	15 4		14 0	15 8			13 6	15 5		
	1873*....	12 4	14 4		13 1	14 5			5 0	13 4		
<i>Red River.</i>												
Shreveport....	1877....	16 4	2 6		23 3	17 5			24 1	20 8		
	1876....	7 2	3 9		6 6	2 8			6 9	4 0		
	1875....	14 0	6 9		6 7	2 10			12 6	2 11		
	1874....	11 3	6 11		9 6	4 7			12 4	7 8		
	1873....	8 5	4 3		13 3	6 3			22 8	12 5		

* Below high water mark.

† Receded from gauge.

The comparison furnished in the above between 1875 and 1877 will be found instructive.*

But still another fact remains to be considered; for, notwithstanding late crops, poor picking seasons, and low rivers, there appears hitherto to have been, as we have already seen, an almost constant increase from year to year, down to the present season, in the rapidity with which cotton has been marketed. In 1876-7 half of the port receipts had reached the ports December 8, 1876, while in 1870-71 it was not till January 18, 1871, that the same percentage had been moved. The possibility of such a change is wholly due to the extension and increased capacity of Southern railroads. Though of very late years the number of miles of road has not been greatly added to, the carrying capacity has been steadily enlarged. Of course, cotton cannot be brought forward faster than the railroads can move it. So it is always an important question how much can the roads carry? Last crop year we had a pretty fair test of their capacity during the first few months. But to say that no more can be brought to the ports in any one month now, than was then, would be misleading, because even if we admit that they did their utmost during those months, there is and always must be growth—very slow in miles probably for some years to come, but, as the business demands it, there will be further large additions to rolling-stock.

With these suggestions and explanations, we may now with profit recall the surroundings of each crop since 1871 during the picking season, and notice the helps and hindrances which hastened or retarded the movement to the ports. Briefly stated, they are as follows:

* In above tables as to height of rivers, New Orleans is reported below high-water mark of 1871 until Sept. 9, '74, when the zero of gauge was changed to high-water mark of April 15 and 16, '74, which is six-tenths of a foot above 1871, or sixteen feet above low-water mark at that point.

1871.—First. The crop was spotted, some ripening early, which made the receipt of first bales misleading, as the most of the crop was late, Georgia being very late. Macon correspondent telegraphed Sept. 9 that receipts to Sept. 1 of new cotton had only been twenty bales. September receipts were therefore small. Second.—No special influences after September affected the movement to the ports, except so far as the closeness of the money market, which was increased by the Chicago fire Oct. 8, tended to hasten it.

1872.—The crop was decidedly earlier, and September receipts were therefore large, but the picking and movement to the ports were after that checked: first, by the general election and its after influence; second, by low state of the rivers; third, and mainly by the epizootic which ran all through the South and put an embargo on all commerce.

1873.—First. The crop was late, and therefore the early receipts, especially in September, were small. Second.—The yellow fever appeared at Shreveport in an unusually virulent form, and was an epidemic over a considerable section in the Southwest, and also for a time at Montgomery, Ala., and elsewhere; this also checked shipments to the ports. Third.—The panic, which occurred the last of September, was the influence of greatest importance; its effect being to derange the exchanges and make the obtaining of currency so nearly impossible as to clog the cotton movement for many weeks very materially; later (but not till December) relief came through the same money pressure forcing the planters and factors to push forward their cotton, as the actual delivery was the only way of obtaining money.

1874.—First. The crop was generally earlier than the last one, the drought hastening the maturity, and conse-

quently the early movement was large. Second.—The rivers tributary to New Orleans were very low; ordinarily this would have considerably checked the movement, but, for reasons stated below, it was of less importance than the same situation ever was before. Third.—Splendid weather made this an unusually favorable season for moving merchandise; the roads were so good that in absence of high water in the rivers it was possible for cotton to be carried, and it was carried, very long distances, to ship by railroads. Fourth.—An inducement for extraordinary vigilance in pushing forward the crop existed in the unusual necessities of the planters. The panic of 1873 rendered it impossible for the factors to make the ordinary advances, so that the producers were under a pressure never before felt, to get money to procure even family supplies. On the first of December there were about 350,000 bales more of the crop in sight than there was of the preceding crop at the same date, although the year's yield was 337,000 bales less.

1875.—First. The crop over a considerable section was later (especially where the drought of 1874 was severest), but in a large portion of the South it was earlier than the previous one. Second.—The panic year of 1873 was the turning point in crop-raising in the South; since then it has been carried on much less on credit, because advances could not be obtained, and consequently the producers have been under much greater pressure than formerly to push their cotton forward early, so as to lay in supplies—such was the case in 1875. Third.—But the picking and marketing season was bad, the rains being very excessive, more like 1877 than any year in our record, and to some considerable extent this checked marketing.

1876.—First. The crop was all of it earlier than in 1874, being in August at about the same point of maturity

as the earlier portion of 1875, and in September the opening of the bolls was further hastened by the hot, dry, forcing weather, so that the first weeks of the season the movement was large. Second.—There was a very marked improvement on 1875 in subsequent weather, it being decidedly favorable for rapid gathering and marketing purposes. Third.—The crop, like those of 1874 and 1875, was largely raised without the advances usual previous to the panic of 1873, and a similar necessity therefore acted upon producers for hurrying it to market.

1877.—First. The crop was late, generally believed to be in August two weeks later than the previous year, making September receipts small. Second.—The picking and marketing season was very bad, especially in the West and Southwest, and, as above stated, more like 1875 than any other year in our record, the temperature being moderate and the rain excessive. Third.—The condition of the planters as to advances was about the same as for the previous year, but some claim that very many of them have a less urgent need for money, as their resources are increasing.

We see from this review that in the past the crop movement has always been under the control of well defined influences. (1) The first in importance and weight has been the necessity to pay debts, settle accounts and obtain supplies—pressing needs not admitting of delay or postponement. (2) Next comes the maturity of the crop, either hastening or delaying, but generally only during early weeks. (3) This latter influence, however, is soon swallowed up by the greater one, the character of the picking season, either rainy or fair. (4) Then we have the other special conditions, such as height of rivers, the epizootic of 1872 and the panic of 1873, &c. As in the past these facts have determined the movement, so will

they in the future, except so far as the changed circumstances of the planters may remove the stimulus for pushing cotton forward.

With these explanations and suggestions, the reader is in position discreetly to forecast the movement of any crop, through the fall and winter months, if he will only inform himself accurately with regard to the peculiarities of the season on the points we have specified, and use the tables which are given below for comparison.

MONTHLY MOVEMENT OF THE CROP.

The following shows the comparative monthly receipts for five years, and the percentages received at the beginning of each month of total port receipts and of total crop.

Monthly Receipts.	Year beginning September 1.				
	1876.	1875.	1874.	1873.	1872.
September.....	236,868	169,077	134,376	115,255	184,744
October.....	675,269	610,316	536,968	355,323	444,003
November.....	901,392	740,116	676,295	576,103	530,153
December.....	787,769	821,177	759,036	811,668	524,975
Total to Jan. 1...	2,601,289	2,340,686	2,106,675	1,858,549	1,683,875
January.....	500,680	637,067	444,052	702,168	569,430
Total to Feb. 1....	3,101,969	2,977,753	2,550,727	2,560,517	2,253,305
February.....	449,686	479,801	383,324	482,688	462,552
Total to March 1..	3,551,655	3,457,554	2,934,051	3,043,205	2,715,857
March.....	182,937	300,128	251,433	332,703	309,307
Total to April 1...	3,734,592	3,757,682	3,185,484	3,375,908	3,025,164
April.....	100,194	163,593	133,598	173,986	218,879
Total to May 1....	3,834,786	3,921,275	3,319,082	3,549,894	3,244,043
May.....	68,939	92,600	81,780	127,346	173,693
Total to June 1...	3,903,725	4,013,875	3,400,862	3,677,240	3,417,736
June.....	36,030	42,234	56,010	59,701	72,602
Total to July 1....	3,939,755	4,056,109	3,456,872	3,736,741	3,490,338
July.....	17,631	29,422	17,061	31,856	83,515
Total to August 1..	3,957,386	4,085,531	3,473,936	3,768,597	3,573,853
August.....	14,462	33,626	13,521	23,391	46,467
Corrections.....	66,293	71,985	9,709	12,299	31,026
Total to Sept. 1. .	4,028,141	4,191,142	3,497,169	3,804,290	3,651,346
Year's port receipts.	4,038,141	4,191,142	3,497,169	3,804,290	3,651,346
Overland.....	300,282	333,146	205,339	237,572	141,500
Southern consumption	117,000	145,000	130,483	128,526	137,662
Year's total crop..	4,455,423	4,669,288	3,832,991	4,170,388	3,930,508

	1876.	1875.	1874.	1873.	1872.
Per cent of total port receipts to Jan. 1.	64.42	55.84	60.24	48.84	46.11
Per cent of total port receipts to Feb. 1.	76.82	71.05	72.93	67.30	61.71
Per cent of total port receipts to Mar. 1.	87.95	82.49	83.89	79.99	71.38
Per cent of total port receipts to April 1.	92.48	89.66	91.08	88.74	82.85
Per cent of total port receipts to May 1.	94.96	93.56	94.90	93.31	88.84
Per cent of total port receipts to June 1.	96.67	95.77	97.24	96.66	93.60
Per cent of total port receipts to July 1.	97.56	96.77	98.84	98.22	95.59
Per cent of total port receipts to Aug. 1.	98.00	97.48	99.33	99.06	97.87
Per cent of total crop to Jan. 1.	57.99	50.13	54.96	44.56	42.83
Per cent of total crop to Feb. 1.	69.16	63.77	66.54	61.39	57.32
Per cent of total crop to March 1.	79.18	74.04	76.54	75.37	69.09
Per cent of total crop to April 1.	83.26	80.47	83.10	80.91	76.96
Per cent of total crop to May 1.	85.49	83.98	86.59	85.12	82.33
Per cent of total crop to June 1.	87.03	85.96	88.72	88.17	86.95
Per cent of total crop to July 1.	87.83	86.86	90.18	89.60	88.80
Per cent of total crop to Aug. 1.	88.23	87.49	90.63	90.36	90.92
Half the port receipts received.	Dec. 8	Dec. 20.	Dec. 15	Jan. 2.	Jan. 8.
On which day receipts were.	2,032,132	2,090,674	1,745,630	1,909,958	1,822,525
Half the total crop received.	Dec. 16	Dec. 30.	Dec. 22.	Jan. 11.	Jan. 16.
On which day receipts were.	2,253,747	2,330,076	1,916,767	2,083,115	1,978,164

The reasons for the varying dates at which half the port receipts and half the crop had been received in the years named, have been set out above.

DAILY RECEIPTS AND DAILY PERCENTAGES FOR FIVE YEARS.

We now give our statement of the total arrivals at the ports each day for five years, and the percentage which had been up to the close of each day received of total port receipts for the same years.

SEPTEMBER.						OCTOBER.					
Day of Month.	1872.	1873.	1874.	1875.	1876.	Day of Month.	1872.	1873.	1874.	1875.	1876.
1.....	8.	1,439	1,265	1,061	1,918	1.....	11,900	7,501	10,711	11,531	8.
2.....	3,938	1,571	1,075	1,380	1,691	2.....	8,888	7,989	10,511	12,096	30,711
3.....	1,617	2,101	1,615	1,731	8.	3.....	11,369	6,452	12,251	8.	15,621
4.....	2,530	1,497	1,682	1,107	4,630	4.....	11,266	5,702	8.	19,503	8.
5.....	2,057	2,206	2,115	8.	2,996	5.....	11,217	8.	17,584	20,116	19,197
6.....	4,055	1,563	8.	3,764	3,111	6.....	8.	8,708	17,543	15,078	22,115
7.....	3,110	8.	3,390	3,228	3,111	7.....	16,475	8,016	14,766	16,381	19,217
8.....	8.	3,231	1,957	3,116	3,982	8.....	18,389	7,611	14,416	19,415	8.
9.....	6,118	2,289	1,841	3,621	4,708	9.....	9,627	8,069	18,207	17,381	32,019
10.....	4,963	1,911	2,746	3,928	8.	10.....	11,988	11,814	14,587	8.	21,533
11.....	4,725	2,510	3,423	3,137	8,923	11.....	15,816	8,131	8.	32,312	20,722
12.....	3,771	2,834	3,214	8.	4,788	12.....	10,938	8.	27,582	21,822	18,950
13.....	7,308	2,571	8.	7,119	7,752	13.....	17,260	16,470	20,714	20,576	20,318
14.....	4,155	8.	5,612	6,512	6,085	14.....	8.	13,400	18,726	20,518	19,812
15.....	8.	5,182	5,176	5,417	7,899	15.....	21,967	12,066	18,512	25,171	8.
16.....	9,480	3,572	3,921	5,401	7,538	16.....	12,868	15,572	20,751	19,629	38,513
17.....	12,129	3,890	3,812	6,200	8.	17.....	11,029	10,981	16,819	8.	21,031
18.....	7,160	4,209	6,225	5,327	13,925	18.....	15,418	15,905	8.	28,753	27,821
19.....	7,639	3,271	6,641	8.	10,117	19.....	16,644	8.	28,161	25,381	24,796
20.....	9,339	3,390	8.	8,845	10,361	20.....	8.	22,613	21,432	22,463	21,843
21.....	8,910	8.	10,421	6,821	9,876	21.....	18,617	13,272	23,034	23,064	26,617
22.....	8.	5,794	6,512	8,173	12,112	22.....	23,201	18,053	23,267	27,825	8.
23.....	11,561	9,601	7,521	8,149	13,538	23.....	18,198	16,798	23,876	20,782	38,824
24.....	15,067	4,912	6,682	10,015	8.	24.....	20,005	16,784	18,523	8.	25,325
25.....	8,419	7,004	8,916	10,109	20,015	25.....	15,509	16,107	43,015	23,571	23,571
26.....	9,372	7,581	8,495	13,011	13,011	26.....	17,692	8.	31,318	30,781	29,476
27.....	12,687	6,820	8.	17,315	11,978	27.....	8.	21,251	21,071	21,477	28,764
28.....	9,578	8.	13,016	12,185	14,421	28.....	20,138	16,038	19,115	27,815	8.
29.....	8.	11,308	7,102	11,978	19,682	29.....	25,384	19,072	22,106	24,746	44,564
30.....	14,963	16,759	9,821	12,820	15,091	30.....	20,019	16,299	29,115	20,415	32,532
31.....	8.	8.	8.	8.	8.	31.....	20,561	11,035	18,704	18,631	675,260
Total.	184,744	115,255	134,376	169,077	236,868	Total.	444,003	355,323	536,968	610,316	

NOVEMBER.					DECEMBER.						
Day of Month.	1872.	1873.	1874.	1875.	1876.	Day of Month.	1872.	1873.	1874.	1875.	1876.
1.....	18,540	25,261	S.	18,611	28,119	1.....	S.	20,472	24,517	22,842	30,821
2.....	21,579	S.	26,023	30,115	35,011	2.....	21,660	26,084	28,921	26,301	21,089
3.....	S.	31,852	28,995	33,181	32,587	3.....	25,282	22,843	19,111	20,856	S.
4.....	21,836	17,474	22,715	22,074	26,382	4.....	16,918	23,275	34,055	35,581	41,873
5.....	26,520	25,216	26,178	29,328	S.	5.....	30,500	28,218	31,842	31,662	31,662
6.....	18,270	17,921	20,891	18,024	41,599	6.....	21,269	25,008	S.	30,511	32,325
7.....	23,108	16,212	28,531	S.	37,082	7.....	16,500	S.	41,726	29,087	29,767
8.....	21,689	19,842	S.	38,913	35,431	8.....	S.	40,210	22,952	26,812	33,072
9.....	14,625	S.	28,611	22,825	27,963	9.....	19,374	26,615	26,531	22,913	26,981
10.....	S.	30,421	28,714	25,874	40,321	10.....	21,990	27,632	26,509	25,918	S.
11.....	18,707	11,127	20,604	25,987	27,119	11.....	18,318	22,371	28,977	20,385	42,863
12.....	23,318	17,564	28,111	20,851	S.	12.....	20,972	33,111	37,015	S.	29,247
13.....	11,280	18,059	27,018	33,221	56,348	13.....	23,890	23,023	S.	49,512	29,426
14.....	17,900	25,345	17,955	S.	29,245	14.....	15,666	S.	41,476	30,833	33,977
15.....	18,956	18,111	S.	39,917	34,892	15.....	S.	40,009	29,862	35,698	35,612
16.....	16,986	S.	30,732	26,145	29,611	16.....	17,742	26,018	21,915	26,682	23,479
17.....	S.	36,572	31,222	28,522	32,724	17.....	26,846	22,901	21,897	31,592	S.
18.....	23,504	18,422	21,765	25,198	27,890	18.....	15,388	33,607	29,578	25,519	43,343
19.....	19,135	19,391	27,863	31,611	S.	19.....	19,080	39,418	28,601	S.	31,246
20.....	16,000	19,261	28,571	23,701	51,462	20.....	24,409	29,531	S.	48,381	23,675
21.....	23,257	19,845	21,171	S.	28,437	21.....	12,870	S.	31,692	22,156	25,381
22.....	18,403	16,314	S.	37,989	41,893	22.....	S.	55,781	31,701	26,384	25,931
23.....	15,633	S.	37,376	38,191	26,725	23.....	21,580	27,037	21,587	33,973	28,042
24.....	S.	28,278	27,824	27,792	31,989	24.....	25,821	40,756	25,561	28,014	45,824
25.....	25,677	21,087	26,082	33,421	29,078	25.....	12,996	28,431	20,415	28,795	28,797
26.....	29,488	27,814	26,314	33,517	S.	26.....	13,905	29,005	23,343	S.	36,821
27.....	21,316	22,895	28,214	21,721	41,765	27.....	18,924	23,508	S.	36,821	23,076
28.....	20,840	15,621	S.	36,479	32,931	28.....	16,575	S.	26,018	21,125	23,011
29.....	22,465	26,702	S.	38,830	38,830	29.....	20,369	26,131	17,506	31,917	20,862
30.....	18,101	20,472	.....	25,772	27,862	30.....	20,088	20,197	18,643	37,913	18,523
31.....	.....	.....	.....	.....	.....	31.....	.....	.....	.....	.....	.....
Total.	530,153	576,103	676,295	740,416	901,392	Total.	521,975	811,468	759,036	821,177	787,769

JANUARY.						FEBRUARY.					
Day of Month.	1873.	1874.	1875.	1876.	1877.	Day of Month.	1873.	1874.	1875.	1876.	1877.
1.....	12,228	20,878	26,517	16,371	18,523	1.....	17,999	^N	11,093	20,401	23,468
2.....	13,529	31,240	14,389	^N	16,245	2.....	^N	35,391	17,152	20,117	22,487
3.....	21,631	25,033	^N	32,192	15,384	3.....	27,537	24,172	15,618	25,716	28,011
4.....	18,760	^N	24,391	25,912	12,671	4.....	21,661	22,631	16,721	17,084	^N
5.....	^N	40,990	10,043	23,810	12,891	5.....	17,656	15,507	21,174	19,076	28,732
6.....	21,148	19,702	9,764	16,700	13,218	6.....	14,317	23,482	14,337	^N	25,353
7.....	23,111	19,911	7,568	21,787	^N	7.....	21,336	18,914	^N	20,332	17,446
8.....	22,066	11,478	13,845	21,812	27,877	8.....	22,286	^N	27,461	26,011	19,637
9.....	18,036	22,417	13,640	^N	14,735	9.....	^N	36,822	15,578	14,452	25,768
10.....	26,877	15,304	^N	36,925	14,174	10.....	23,511	17,664	16,394	20,184	13,706
11.....	14,495	^N	20,164	32,478	13,706	11.....	29,611	19,011	16,817	19,055	^N
12.....	^N	39,225	15,122	21,893	19,317	12.....	20,376	14,612	14,124	16,269	29,647
13.....	27,874	25,916	10,014	23,215	19,037	13.....	13,397	18,097	15,619	^N	21,479
14.....	22,732	26,007	17,361	23,147	^N	14.....	16,900	15,601	^N	27,614	11,918
15.....	21,516	22,314	18,978	19,512	24,043	15.....	17,380	^N	24,471	18,047	20,474
16.....	21,977	32,021	8,966	^N	23,366	16.....	^N	32,612	12,974	16,948	19,536
17.....	25,171	23,715	^N	32,468	14,705	17.....	50,556	21,108	15,928	16,081	11,673
18.....	15,328	^N	18,178	22,523	13,599	18.....	23,077	16,984	11,581	16,235	^N
19.....	^N	39,941	20,963	28,311	17,567	19.....	15,293	12,089	16,112	12,079	19,420
20.....	24,309	18,047	16,214	20,477	17,212	20.....	16,636	21,210	9,456	^N	18,071
21.....	23,218	25,119	17,621	21,001	^N	21.....	15,303	14,642	^N	27,656	11,733
22.....	18,438	23,414	14,916	16,913	23,144	22.....	16,999	^N	21,374	20,344	7,329
23.....	29,678	24,916	16,571	^N	20,981	23.....	^N	28,834	12,698	19,557	18,965
24.....	29,697	27,698	^N	25,314	13,467	24.....	31,876	13,642	11,867	17,282	8,896
25.....	15,319	^N	27,532	21,782	19,715	25.....	18,098	14,669	11,979	15,875	^N
26.....	^N	36,171	13,376	21,333	15,178	26.....	14,600	13,822	11,515	11,904	16,982
27.....	20,899	26,408	19,805	32,782	25,290	27.....	12,096	15,018	12,378	^N	12,797
28.....	24,293	26,943	22,043	28,421	^N	28.....	15,831	16,144	8,903	25,719	11,368
29.....	16,847	26,005	20,056	16,074	31,977	29.....	^N	^N	^N	15,563	^N
30.....	13,385	19,994	14,922	^N	22,468	30.....	^N	^N	^N	^N	^N
31.....	23,928	26,728	11,093	27,701	17,987	31.....	^N	^N	^N	^N	^N
Total.	569,430	702,168	444,052	637,067	500,680	Total.	462,552	482,688	383,324	479,801	449,686

MARCH.

APRIL.

Day of Month.	1873.	1874.	1875.	1876.	1877.	Day of Month.	1873.	1874.	1875.	1876.	1877.
1.....	9,343	Σ.	8,903	7,812	6,325	1.....	10,183	11,214	4,505	8,735	Σ.
2.....	Σ.	26,819	10,917	12,518	9,732	2.....	7,394	6,901	5,976	Σ.	5,311
3.....	14,998	12,802	14,779	12,817	4,567	3.....	8,356	8,063	5,160	15,839	6,277
4.....	17,480	18,943	10,928	10,111	Σ.	4.....	7,940	7,629	Σ.	7,091	4,836
5.....	12,246	10,459	10,617	Σ.	8,531	5.....	5,689	Σ.	7,577	9,576	3,083
6.....	10,621	14,637	8,210	19,134	6,678	6.....	Σ.	12,987	8,187	1,483	4,915
7.....	16,263	11,735	Σ.	15,922	8,722	7.....	10,996	Σ.	6,045	10,114	3,164
8.....	12,269	Σ.	13,641	13,671	6,561	8.....	6,967	7,691	4,185	Σ.	Σ.
9.....	Σ.	19,841	12,114	6,387	16,228	9.....	10,928	6,812	7,523	Σ.	5,973
10.....	13,759	10,817	9,247	10,361	8,173	10.....	5,272	5,812	5,319	10,675	4,406
11.....	16,860	15,914	12,365	8,151	Σ.	11.....	9,593	5,637	Σ.	6,138	4,184
12.....	7,269	12,002	9,263	Σ.	8,391	12.....	5,149	Σ.	10,104	6,639	2,347
13.....	13,198	11,112	7,845	17,597	8,017	13.....	Σ.	9,317	6,189	5,112	2,641
14.....	19,768	10,571	Σ.	11,286	6,758	14.....	11,096	6,527	6,008	6,987	2,791
15.....	12,657	Σ.	14,581	11,015	7,692	15.....	Σ.	6,527	3,285	1,782	Σ.
16.....	Σ.	16,789	5,923	5,722	6,314	16.....	9,269	6,817	6,374	Σ.	5,136
17.....	20,356	9,721	7,439	9,628	4,927	17.....	9,216	4,918	2,983	6,759	2,579
18.....	9,138	10,008	7,489	10,121	Σ.	18.....	13,563	5,721	Σ.	5,231	4,682
19.....	8,220	12,628	8,465	Σ.	7,229	19.....	7,396	Σ.	6,077	4,694	1,561
20.....	11,804	9,222	5,779	12,559	5,378	20.....	Σ.	7,391	3,169	2,865	2,721
21.....	9,270	Σ.	Σ.	7,913	7,581	21.....	13,926	4,007	3,897	6,478	4,995
22.....	7,955	Σ.	11,312	13,096	4,492	22.....	5,771	5,672	2,843	3,714	Σ.
23.....	Σ.	18,011	8,224	10,312	5,913	23.....	4,497	3,821	3,426	Σ.	5,923
24.....	13,568	8,161	7,436	9,375	5,836	24.....	9,416	5,078	2,327	8,379	3,075
25.....	Σ.	11,876	7,896	10,479	Σ.	25.....	Σ.	6,171	Σ.	4,517	7,102
26.....	8,888	Σ.	Σ.	Σ.	7,422	26.....	5,326	Σ.	4,613	3,592	3,064
27.....	9,867	8,120	6,254	13,806	6,115	27.....	Σ.	5,735	3,932	3,178	2,680
28.....	5,990	9,713	Σ.	6,317	4,682	28.....	8,495	6,591	4,375	5,184	1,502
29.....	9,501	10,124	Σ.	8,722	1,581	29.....	10,970	3,972	3,117	2,956	Σ.
30.....	6,630	Σ.	11,776	Σ.	5,212	30.....	7,999	3,391	4,417	Σ.	4,640
31.....	Σ.	14,077	6,384	13,494	3,611	31.....	Σ.	Σ.	Σ.	Σ.	Σ.
Total	509,397	332,703	251,433	300,128	182,937	Total	218,879	175,986	133,598	163,593	100,194

MAY.											
Day of Month.	1873.	1874.	1875.	1876.	1877.	JUNE.					
Day of Month.	1873.	1874.	1875.	1876.	1877.	1873.	1874.	1875.	1876.	1877.	1877.
1.....	4,328	4,399	2,501	3,097	2,013	8.	3,090	2,781	1,962	1,351	1,351
2.....	10,719	4,976	8.	3,351	3,361	3,609	2,627	2,861	2,084	1,259	1,259
3.....	8,196	8.	7,317	4,906	1,975	3,310	2,614	2,063	1,378	8.	8.
4.....	8.	6,694	5,874	3,098	4,512	3,310	2,978	2,063	1,378	2,821	2,821
5.....	9,901	5,570	2,117	4,761	2,032	3,006	2,674	1,570	1,110	2,309	2,309
6.....	6,594	2,918	2,584	4,691	8.	4,096	2,112	8.	1,110	1,812	1,812
7.....	9,166	3,298	2,918	8.	5,243	3,017	8.	3,028	1,925	1,247	1,247
8.....	5,260	5,915	2,275	7,008	4,187	8.	4,161	2,241	1,312	1,531	1,531
9.....	6,039	2,971	8.	2,484	2,435	8.	1,352	3,107	1,528	1,186	1,186
10.....	6,261	8.	5,161	4,612	1,791	2,614	2,201	2,921	1,209	8.	8.
11.....	8.	9,842	2,915	3,478	3,575	2,376	1,431	2,916	8.	1,584	1,584
12.....	9,899	3,378	3,371	3,594	2,189	2,501	1,892	1,463	2,119	3,061	3,061
13.....	6,739	4,274	3,415	2,882	8.	3,020	1,612	8.	1,543	1,385	1,385
14.....	4,680	3,741	3,683	8.	4,167	2,370	8.	3,845	724	610	610
15.....	6,900	4,311	4,465	6,189	2,614	8.	3,571	1,987	719	1,121	1,121
16.....	6,667	3,824	8.	2,786	2,075	8.	1,684	1,899	1,586	1,186	1,186
17.....	5,391	8.	8.	2,902	2,895	3,793	2,351	2,031	784	8.	8.
18.....	8,221	9,717	2,130	2,039	3,631	2,240	1,701	2,115	8.	1,075	1,075
19.....	4,189	4,672	2,651	3,811	1,304	2,009	2,603	2,146	3,107	1,837	1,837
20.....	7,385	3,042	1,581	8.	8.	2,014	8.	8.	1,614	1,375	1,375
21.....	3,707	4,728	3,151	1,775	2,927	3,386	2,701	2,676	1,165	607	607
22.....	5,806	4,791	8.	8.	2,927	8.	8.	1,143	816	1,399	1,399
23.....	4,930	8.	2,885	4,394	2,736	2,861	2,371	1,143	2,004	904	904
24.....	8.	6,415	3,484	3,856	891	3,001	1,161	1,257	2,004	8.	8.
25.....	8,166	3,842	2,166	2,779	1,813	2,152	1,167	1,698	8.	1,465	1,465
26.....	5,984	4,921	2,285	2,285	2,385	2,072	1,916	2,041	2,389	1,114	1,114
27.....	4,700	3,922	1,575	1,519	1,171	2,701	1,311	8.	722	2,031	2,031
28.....	8.	8.	8.	8.	8.	1,919	8.	1,894	2,337	506	506
29.....	3,658	4,816	1,875	4,062	1,791	8.	2,826	1,370	1,490	1,312	1,312
30.....	4,960	2,713	8.	1,999	1,930	2,463	891	971	954	1,026	1,026
31.....	4,901	3,690	2,258	1,552	1,304	.....	.....	.....	.....	.....	.....
Total.	173,693	127,316	81,789	92,600	68,939	72,602	59,501	56,010	42,234	36,030	36,030

AUGUST.

Day of Month.	1873.	1874.	1875.	1876.	1877.
1.....	1,727	1,092	521	635	421
2.....	1,874	5	310	724	261
3.....	5	1,056	390	501	861
4.....	2,781	517	390	816	452
5.....	2,175	701	301	834	5
6.....	2,201	924	301	839	839
7.....	1,204	702	207	1,141	1,141
8.....	1,997	960	5	1,168	217
9.....	1,744	5	197	1,082	364
10.....	5	701	361	761	245
11.....	2,583	601	539	1,038	531
12.....	1,738	617	218	1,081	5
13.....	1,526	967	168	5	487
14.....	1,631	787	195	1,963	398
15.....	1,930	601	5	1,711	367
16.....	1,423	5	457	1,069	261
17.....	5	1,499	330	845	561
18.....	2,231	864	224	789	394
19.....	1,873	1,102	303	607	5
20.....	1,906	592	395	5	1,167
21.....	1,431	697	675	1,361	698
22.....	1,678	971	581	1,807	586
23.....	1,297	5	532	1,822	401
24.....	5	769	467	912	311
25.....	1,573	1,101	397	1,168	365
26.....	1,282	901	899	891	5
27.....	1,979	899	944	5	686
28.....	1,574	1,021	736	4,011	597
29.....	1,851	1,251	5	1,824	764
30.....	2,465	5	1,689	2,096	575
31.....	5	1,522	1,800	2,261	766
Total	46,467	23,391	13,524	33,626	11,462

JULY.

Day of Month.	1873.	1874.	1875.	1876.	1877.
1.....	3,684	1,456	486	1,073	5
2.....	3,851	806	513	5	1,541
3.....	3,572	1,315	650	2,518	1,864
4.....	3,896	726	5	1,009	848
5.....	2,272	5	668	2,067	367
6.....	5	3,201	780	961	914
7.....	4,539	1,289	656	1,481	849
8.....	4,248	1,505	3,015	452	5
9.....	2,931	1,066	679	5	845
10.....	3,183	1,782	872	1,128	798
11.....	3,071	1,323	5	691	634
12.....	2,665	5	465	1,485	479
13.....	3,962	1,731	439	629	726
14.....	2,274	1,042	1,205	1,282	758
15.....	3,619	1,507	325	978	5
16.....	2,901	1,187	653	5	364
17.....	3,649	1,527	237	1,468	572
18.....	2,918	1,181	5	1,217	839
19.....	5	1,539	489	1,004	415
20.....	3,109	521	326	367	906
21.....	2,260	614	5	1,338	239
22.....	3,281	790	703	874	5
23.....	2,799	901	515	5	572
24.....	3,284	870	301	1,795	663
25.....	3,671	402	5	915	621
26.....	5	5	354	906	314
27.....	1,114	691	157	691	249
28.....	3,661	607	458	1,267	201
29.....	1,601	498	541	1,82	5
30.....	2,172	1,236	585	5	549
31.....	1,112	999	288	1,315	501
Total	83,515	31,856	17,064	29,422	17,631

PERCENTAGE, OF TOTAL POUND RECEIPTS, RECEIVED AT THE CLOSE OF EACH DAY.*

SEPTEMBER.				OCTOBER.				NOVEMBER.			
Day of Month.	1872.	1873.	1874.	1875.	1876.	Day of Month.	1872.	1873.	1874.	1875.	1876.
1	N.	00:04	00:03	00:02	00:05	1	17:73	13:03	N.	19:01	23:25
2	00:11	00:08	00:06	00:05	00:09	2	18:32	N.	19:91	19:76	23:28
3	00:15	00:13	00:11	00:10	N.	3	N.	13:95	20:77	20:56	21:15
4	00:22	00:17	00:16	00:13	00:10	4	18:92	14:11	21:12	21:10	25:61
5	00:28	00:23	00:22	N.	00:28	5	19:61	15:07	22:17	21:80	N.
6	00:39	00:27	N.	00:22	00:36	6	20:11	15:51	22:77	22:25	26:72
7	00:17	N.	00:32	00:30	00:14	7	20:78	15:97	23:59	N.	27:65
8	N.	00:36	00:38	00:37	00:53	8	21:35	16:19	N.	23:18	28:51
9	00:74	00:42	00:43	00:46	00:65	9	21:76	N.	21:11	23:72	29:20
10	00:78	00:47	00:51	00:55	N.	10	N.	17:29	25:23	24:26	30:20
11	00:91	00:53	00:60	00:63	00:88	11	22:27	17:65	25:82	24:65	30:88
12	01:01	00:61	00:60	N.	00:99	12	22:91	18:31	26:63	25:38	N.
13	01:21	00:68	N.	00:80	01:19	13	23:30	18:52	27:40	26:18	32:27
14	01:33	N.	00:86	00:95	01:31	14	23:79	19:15	27:92	N.	33:00
15	N.	00:81	01:00	01:08	01:53	15	21:31	19:03	N.	27:13	33:86
16	01:58	00:91	01:12	01:21	01:72	16	21:78	N.	28:80	27:75	31:59
17	01:32	01:01	01:23	01:36	N.	17	N.	20:89	29:49	28:43	35:40
18	02:11	01:12	01:41	01:49	02:06	18	25:12	21:38	30:30	29:01	36:09
19	02:32	01:27	01:60	N.	02:32	19	25:95	21:91	31:10	29:80	N.
20	02:58	01:35	N.	01:70	02:58	20	26:39	22:41	31:92	30:36	37:31
21	N.	N.	01:90	01:86	02:58	21	27:03	22:93	32:55	N.	38:07
22	02:82	N.	01:50	02:08	03:12	22	27:53	23:36	N.	31:25	39:18
23	03:14	01:76	02:30	02:25	03:46	23	27:96	N.	33:59	32:16	39:85
24	03:55	01:89	02:49	02:49	N.	24	N.	21:11	31:39	32:82	40:61
25	03:78	02:07	02:71	02:73	03:95	25	28:66	21:63	33:62	33:62	41:36
26	01:04	02:27	02:39	N.	01:28	26	29:17	25:26	35:88	34:18	N.
27	01:59	02:45	N.	03:11	01:65	27	30:03	25:86	36:69	34:77	42:39
28	01:65	N.	03:36	03:44	03:00	28	30:63	26:27	37:38	N.	43:21
29	02:71	03:56	03:73	03:73	03:19	29	31:21	26:97	37:68	35:61	44:17
30	N.	03:03	03:81	04:03	05:87	30	31:71	N.	31:71	36:25	44:91
31	05:06	N.	N.	N.	N.	31	N.	N.	38:53	N.	N.

* To illustrate the meaning of these figures, take as an example the 30th of September, 1874;—on that day there had been received (63-84) three per cent and eighty-four hundredths of one per cent of the year's total receipts.

PERCENTAGE, OF TOTAL PORT RECEIPTS, RECEIVED AT THE CLOSE OF EACH DAY.*											
DECEMBER.						JANUARY.					
Day of Month	1872.	1873.	1874.	1875.	1876.	Day of Month.	1873.	1874.	1875.	1876.	1877.
1	28.05	39.24	36.80	45.67	1	.....	49.40	61.00	56.24	61.88
2	28.71	40.06	37.42	46.19	2	.....	50.22	61.41	.....	65.28
3	29.31	40.61	37.93	.....	3	.....	50.88	.....	57.01	65.66
4	29.93	41.19	38.47	47.31	4	.....	51.55	62.11	57.63	65.97
5	30.69	42.19	39.09	48.09	5	.....	52.27	62.39	58.20	66.29
6	31.41	42.99	39.50	48.69	6	.....	52.97	62.67	58.60	66.62
7	32.14	43.69	40.20	49.50	7	.....	53.60	62.89	59.19	.....
8	32.41	44.33	40.84	50.32	8	.....	53.89	63.28	59.71	67.31
9	33.11	45.10	41.38	50.99	9	.....	54.29	63.68	.....	67.68
10	33.83	45.86	42.00	.....	10	.....	55.32	64.25	60.59	68.03
11	34.42	46.69	42.49	52.05	11	.....	55.80	64.85	61.36	68.42
12	35.20	47.55	.....	52.78	12	.....	56.00	64.97	62.43	68.89
13	35.89	48.33	43.67	53.51	13	.....	56.69	65.17	62.89	.....
14	36.45	49.73	44.93	54.35	14	.....	57.27	66.01	63.46	69.96
15	37.30	50.70	45.25	55.20	15	.....	58.11	66.27	.....	70.54
16	38.19	51.11	46.65	55.81	16	.....	58.71	.....	61.23	70.90
17	38.49	51.41	47.33	56.88	17	.....	59.79	67.38	65.41	71.24
18	39.38	52.26	47.33	57.66	18	.....	60.26	67.85	65.63	72.11
19	40.42	53.08	.....	58.21	19	.....	60.93	68.78	66.81	.....
20	41.19	54.07	48.18	58.80	20	.....	61.54	68.78	68.81	73.20
21	42.66	54.97	49.25	59.44	21	.....	62.31	69.25	.....	73.53
22	43.37	55.59	50.69	60.13	22	.....	63.03	.....	67.41	73.53
23	44.11	56.32	51.36	.....	23	.....	63.99	70.01	68.63	71.02
24	45.19	56.91	52.04	61.27	24	.....	64.69	70.99	69.33	71.40
25	45.55	57.57	52.73	61.84	25	.....	65.39	71.62	70.00	73.02
26	46.57	58.32	53.60	62.87	26	.....	66.08	72.19	70.39	75.81
27	47.46	59.20	54.11	63.44	27	.....	66.60	72.62	.....	76.37
28	48.32	59.71	54.91	63.96	28	.....	67.31	72.94	71.05	76.82
29	48.85	60.24	55.85	64.42	29	.....	.....	.....	.....	.....
30	30	.....	.....	.....	.....	.....
31	31	.....	.....	.....	.....	.....

* To illustrate the meaning of these figures, take as an example the 31st of December, 1874;—on that day there had been received (60.24) sixty per cent and twenty-four hundredths of one per cent of the year's total port receipts.

PERCENTAGE, OF TOTAL PORT RECEIPTS, RECEIVED AT THE CLOSE OF EACH DAY.*

PERCENTAGE OF FERTILE EGGS.											
MARCH.				APRIL.				MAY.			
Day of Month.			1873.	Day of Month.			1873.	Day of Month.			1873.
1874.	1875.	1876.	1877.	1874.	1875.	1876.	1877.	1874.	1875.	1876.	1877.
1	81.15	82.68	88.11	83.14	91.22	89.87	88.98	93.43	94.98	93.61	95.01
2	80.70	84.89	88.35	83.34	89.22	91.35	92.61	93.56	95.19	93.72	95.10
3	81.87	83.29	88.46	83.57	90.43	91.53	92.77	89.18	93.84	93.81	95.14
4	81.53	83.51	88.68	83.79	89.63	90.41	92.89	93.73	95.36	93.94	95.26
5	85.20	83.51	88.68	83.91	91.78	90.61	92.97	89.78	93.88	94.42	95.31
6	81.81	85.50	88.68	84.19	92.02	90.75	93.00	89.03	95.42	94.14	95.41
7	82.19	85.74	88.68	84.39	92.19	90.99	93.17	90.18	95.54	94.14	95.41
8	82.50	85.74	88.68	84.59	92.32	91.14	93.31	90.33	95.64	94.30	95.41
9	83.03	86.13	89.62	84.79	92.46	91.41	93.31	90.50	95.64	94.30	95.41
10	83.31	86.48	89.83	84.99	92.59	91.50	93.31	90.67	95.79	94.47	95.44
11	83.73	87.10	89.83	85.11	92.72	91.50	93.31	90.84	95.87	94.64	95.44
12	84.01	87.36	90.21	85.25	92.85	91.50	93.31	91.01	95.97	94.81	95.44
13	84.34	87.58	90.41	85.39	93.15	91.50	93.31	91.18	96.07	94.98	95.44
14	84.61	87.81	90.61	85.59	93.44	91.50	93.31	91.35	96.18	95.15	95.44
15	84.90	88.00	90.75	85.84	93.73	91.50	93.31	91.52	96.29	95.32	95.44
16	85.17	88.16	90.86	86.09	94.02	91.50	93.31	91.69	96.40	95.49	95.44
17	85.44	88.33	90.96	86.34	94.31	91.50	93.31	91.86	96.51	95.66	95.44
18	85.71	88.50	91.01	86.59	94.60	91.50	93.31	92.03	96.62	95.83	95.44
19	85.98	88.67	91.16	86.84	94.89	91.50	93.31	92.20	96.73	96.00	95.44
20	86.25	88.84	91.31	87.09	95.18	91.50	93.31	92.37	96.84	96.17	95.44
21	86.52	89.01	91.46	87.34	95.47	91.50	93.31	92.54	96.95	96.34	95.44
22	86.79	89.18	91.61	87.59	95.76	91.50	93.31	92.71	97.06	96.51	95.44
23	87.06	89.35	91.76	87.84	96.05	91.50	93.31	92.88	97.17	96.68	95.44
24	87.33	89.52	91.91	88.09	96.34	91.50	93.31	93.05	97.28	96.85	95.44
25	87.60	89.69	92.06	88.34	96.63	91.50	93.31	93.22	97.39	97.02	95.44
26	87.87	89.86	92.21	88.59	96.92	91.50	93.31	93.39	97.50	97.19	95.44
27	88.14	89.99	92.36	88.84	97.21	91.50	93.31	93.56	97.61	97.30	95.44
28	88.41	90.12	92.51	89.09	97.50	91.50	93.31	93.73	97.72	97.41	95.44
29	88.68	90.25	92.66	89.34	97.79	91.50	93.31	93.90	97.83	97.52	95.44
30	88.95	90.38	92.81	89.59	98.08	91.50	93.31	94.07	97.94	97.63	95.44
31	89.22	90.51	92.96	89.84	98.37	91.50	93.31	94.24	98.05	97.74	95.44

1874—on that day were had been received

PERCENTAGE OF TOTAL PORT RECEIPTS, RECEIVED AT THE CLOSE OF EACH DAY.

Day of Month.	JUNE.					JULY.					AUGUST.				
	1874.	1874.	1875.	1876.	1877.	Day of Month.	1873.	1874.	1875.	1876.	1877.	Day of Month.	1873.	1874.	1875.
1	93.71	93.71	97.3	95.82	96.70	1	95.69	98.26	98.86	96.80	N.	1	97.92	99.09	N.
2	93.70	93.81	97.41	95.87	96.71	2	95.80	98.28	98.88	N.	N.	2	97.98	99.09	N.
3	93.82	93.84	97.46	95.90	N.	3	95.89	98.32	98.89	96.86	97.60	3	98.05	99.12	N.
4	93.91	93.96	97.51	N.	93.81	4	96.00	98.31	98.89	96.89	97.67	4	98.11	99.13	N.
5	93.99	97.03	97.52	95.97	96.86	5	96.06	N.	98.91	96.91	97.68	5	98.17	99.15	N.
6	94.11	97.09	N.	96.00	96.91	6	96.19	98.42	98.91	96.96	97.70	6	98.21	99.17	N.
7	94.19	N.	97.67	96.01	96.91	7	96.30	98.45	98.93	96.99	97.72	7	98.26	99.19	N.
8	94.26	97.20	97.75	96.07	96.98	8	96.34	98.49	99.01	97.00	N.	8	98.31	99.22	N.
9	94.35	97.29	97.82	96.11	97.01	9	96.47	98.52	99.06	N.	N.	9	98.38	99.24	N.
10	94.42	97.33	97.91	N.	N.	10	96.56	98.57	99.09	97.03	97.76	10	98.43	99.26	N.
11	94.50	97.38	98.03	96.19	97.01	11	96.63	N.	99.10	97.08	97.78	11	98.51	99.30	N.
12	94.56	97.43	N.	96.24	97.12	12	96.74	98.63	99.11	97.09	97.81	12	98.57	99.32	N.
13	94.63	N.	98.14	96.24	97.17	13	96.80	98.74	99.16	97.12	97.82	13	98.60	99.33	N.
14	94.75	97.52	98.20	96.26	97.20	14	96.96	98.77	99.18	N.	N.	14	98.67	99.37	N.
15	94.86	97.63	98.31	96.39	97.23	15	97.03	98.82	99.20	97.21	97.83	15	98.72	99.42	N.
16	94.92	97.67	98.37	N.	N.	16	97.11	N.	99.25	97.25	97.84	16	98.77	99.44	N.
17	95.03	97.71	98.43	96.39	97.30	17	97.22	98.87	99.26	97.30	N.	17	98.80	99.45	N.
18	95.12	97.81	98.51	96.46	97.35	18	97.29	98.88	99.27	97.35	97.91	18	98.85	99.48	N.
19	95.20	97.89	98.58	96.48	97.39	19	97.38	98.91	99.28	N.	N.	19	98.93	99.53	N.
20	95.28	97.93	98.63	96.53	97.41	20	97.45	98.93	99.29	97.37	97.92	20	98.98	99.55	N.
21	95.31	98.01	98.69	96.56	N.	21	97.51	98.94	99.30	97.37	97.94	21	99.00	99.57	N.
22	95.40	98.09	98.73	96.62	97.45	22	97.61	N.	99.32	97.39	97.96	22	99.03	99.58	N.
23	95.47	98.13	N.	96.67	97.49	23	97.74	98.97	99.33	97.41	97.97	23	99.06	99.60	N.
24	95.52	N.	98.78	96.72	97.51	24	97.79	99.01	99.34	97.45	N.	24	99.08	99.63	N.
25	95.59	98.22	98.85	96.78	97.56	25	97.88	99.03	99.35	N.	97.99	25	99.15	99.67	N.
26						26	97.88	99.03	99.35	97.48	98.00	26	99.25	99.72	N.
27						27						27	99.30	99.75	N.
28						28						28	99.35	99.78	N.
29						29						29	99.40	99.81	N.
30						30						30	99.45	99.84	N.
31						31						31	99.50	99.87	N.
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Corrections end of year—per cent of total port receipts.

Total port receipts

The foregoing tables make unnecessary the usual statement of weekly receipts. In fact, as the corresponding weeks of two succeeding years end on succeeding days of the month, there is always a difference, when a series of years are given, of several days in the comparison between the close of the week of the first and last year. The daily and monthly movements are, therefore, the only compilations that are not misleading.

CHAPTER VIII.

SPOT AND FUTURE MARKETS
AND PRICES.

Changes in the cotton trade—Routes by which cotton was marketed previous to the war—New York's position during same period—Changes the war made in routes—Receipts and sales at New York since—Future-delivery business—Future sales for eight years—Reasons why business in futures is a necessity to the trade—Could not be discontinued—The new arrangement as to weight of 100 bales adopted by Liverpool conference—Prices of futures for seven years—Changes in mode of quoting spot cotton, how and when made—Spot quotations for seven years.

The cotton trade in this country has made very rapid progress in organization and working-power during late years. Previous to the war there was but little unity of feeling or of action, and no market of any considerable importance, outside of the Southern States, except New York; and even New York held a position of comparative insignificance. New Orleans was then, as now, the leading port for marketing the crop, Mobile coming next, and Savannah and Charleston following them, some years Savannah and some years Charleston taking the precedence. The following statement indicates the percentage of the year's yield which the net movement at each port bore to the total movement, from 1854-55 to 1860-61. It will be seen that, according to it, in 1860-61 New Orleans marketed 45.78 per cent of the total; Mobile, 14.29 per cent; Savannah, 12.48 per cent; Charleston, 8.79 per cent; and

the other ports a much less amount, varying from 3.79 per cent to 1.47 per cent.

PERCENTAGE OF RECEIPTS.

RECEIPTS AT—	1854-5	1855-6	1856-7	1857-8	1858-9	'59-60.	'60-61.
Wilmington, &c., N.C.	00.89	00.72	00.89	00.74	00.94	00.85	01.47
Norfolk, &c., Va.....	01.06	00.56	00.78	00.76	00.83	01.18	02.04
Charleston, &c., S. C.	17.03	13.61	12.98	12.54	12.03	10.57	08.79
Savannah, Ga.....	12.91	10.63	10.54	08.74	11.91	10.89	12.43
Apalachicola, &c., Fla.	01.06	03.96	04.47	03.78	04.34	04.00	03.17
Mobile, Ala.....	15.50	18.10	16.46	16.13	17.63	17.48	14.29
New Orleans, La., &c.	42.04	45.58	46.95	43.67	41.79	44.35	45.78
Galveston, &c., Tex..	02.75	03.18	02.94	04.48	04.81	05.23	03.79
Total at ports.....	96.84	96.39	96.01	95.84	94.23	94.55	91.81
Overland from Tenn.	00.26	00.39	00.16	00.30	02.14	02.25	03.75
From plantations by South'n consumers.	02.90	03.22	03.83	03.36	03.58	03.20	04.44
Total crop U. S.....	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Even during the period covered by the above table, New York handled annually several hundred thousand bales, mainly received from the Southern outports, the movement overland being very small. To illustrate the situation and position this city then held in the trade, we give the New York receipts, exports and purchases here for home consumption, from September 1, 1849, to September 1, 1861:

COTTON MOVEMENT AT NEW YORK.

Years.	Total Receipts.	Exports to			Sales for Consump- tion.
		Great Britain.	All other Countries.	Total.	
1849-50....	481,938	200,113	111,687	314,800	167,138
1850-51....	429,742	184,517	136,980	321,497	108,245
1851-52....	537,115	218,771	121,000	339,771	197,344
1852-53....	487,082	207,586	74,657	282,243	204,839
1853-54....	450,473	245,621	82,350	327,971	122,502
1854-55....	509,136	200,889	78,328	279,217	229,919
1855-56....	424,712	181,045	75,419	256,464	168,248
1856-57....	402,625	143,938	50,617	194,555	208,070
1857-58....	351,597	110,721	39,308	150,029	201,568
1858-59....	435,269	120,648	70,970	191,618	243,651
1859-60....	463,433	117,630	81,828	199,458	263,975
1860-61....	435,261	157,381	89,339	246,720	188,541
Total...	5,408,383	2,088,860	1,015,483	3,104,343	2,304,040

These figures represent the gross movement, not the net

movement, and show the average gross receipts for the twelve years to have been 450,699 bales. With the breaking out of the war and the closing of the Southern ports, this movement fell off, of course, because there was comparatively little cotton marketed; but during that period a much larger proportion of the total supply of American staple reached spinners through this city than before the war. The nature of this change in the trade may be seen from a statement of receipts, sales to home spinners, and exports here and total receipts of American cotton in Europe, from 1861-2 to 1864-5.

NEW YORK RECEIPTS AND EXPORTS, SALES TO SPINNERS, AND EUROPEAN RECEIPTS OF AMERICAN COTTON, 1861-1865.

Year.	Receipts at New York.	Total Exports from New York.	Sales to Spinners at New York.	Receipts of American Cotton in Europe.
	Bales.	Bales.	Bales.	Bales.
1861-62	115,427	9,328	125,000	562,000
1862-63	204,229	27,052	170,000	133,000
1863-64	281,794	30,954	225,000	242,000
1864-65	391,635	54,203	316,000	236,000

When the war closed, the route overland, which the blockade of the Southern ports had up to that time made necessary, continued in favor for the marketing of the crops of a considerable section. In fact, for a time a change back to the old routes was impossible, on account of the condition of the Southern railroads. But even after the old communications were restored and new connections made, the movement north, across the Mississippi and Ohio, received but a temporary check, growing subsequently even into larger proportions. As our readers are aware, however, only part, not to exceed 20 per cent, of the overland receipts, now pass through New York, the remainder going to other northern cities or direct to spinners. All other New York arrivals come through the Southern outports, the total gross movement since Septem-

ber 1, 1865, being as follows. We add, also, the stocks, exports, and takings for home consumption, but do not include in this table, nor in that for the ante-war period, sales of spot cotton on speculation, as they were, for most of the time, very imperfectly reported.

RECEIPTS, STOCK AND SALES OF COTTON AT NEW YORK.

Year.	Stock begin- ning year.	Receipts for year.	Stock close of year.	Consump- tion.	Exported	Sales for the year.
1865-66.....	40,000	863,497	88,642	319,393	495,462	814,855
1866-67.....	88,642	674,232	41,497	251,709	469,668	721,377
1867-68.....	41,497	632,328	23,440	275,651	374,734	650,385
1868-69.....	23,440	662,780	7,367	331,015	327,838	658,853
1869-70.....	7,367	780,017	12,984	380,699	413,701	794,400
1870-71.....	12,984	1,101,591	38,875	407,742	667,958	1,075,700
1871-72.....	38,875	738,526	27,027	377,303	373,071	750,374
1872-73.....	27,027	1,093,680	17,746	411,463	573,498	984,961
1873-74.....	17,746	975,750	56,043	481,857	485,596	967,453
1874-75.....	56,043	805,612	34,712	381,771	445,172	826,943
1875-76.....	34,712	943,491	61,267	419,562	494,374	913,936
1876-77.....	61,267	959,955	67,402	522,662	434,158	956,820
Total.....	.....	10,143,459	.....	4,560,827	5,555,230	10,116,057

According to this statement the average of receipts for the twelve years ending September 1, 1877, was 845,288 bales, against an average of 450,699 bales for the twelve years ending September 1, 1861. But such an exhibit in no measure portrays the actual change which has taken place in the relative position of this market, or in the spirit and character of the trade, as it indicates only the dealings for export and consumption in cotton actually handled, and does not represent how the methods of conducting business have been by degrees modified, during the war and since, until the entire system has become essentially new. The truth is, speculative operations have gradually, constantly and (comparing the earliest and latest dates) so very largely increased, that now even spot transactions, which with transit cotton were until recently the only transactions, have come under the influence and almost under the control of sales for future delivery. To set out the history of

this growth, and to give an idea of its present proportions, we have brought together the actual monthly transactions in futures in New York since 1870, made up from the daily cotton circular. Undoubtedly, in the last year or two, these sales have been more fully reported, so that the totals do not absolutely represent the growth.

MONTHLY SALES FOR FUTURE DELIVERY.

Year and Month	Bales.	Year and Month	Bales.	Year and Month	Bales.	Year and Month	Bales.
1870.		1872.		1874.		1876.	
Jan...	50,167	Jan...	450,800	Jan...	642,150	Jan...	505,500
Feb...	66,608	Feb...	480,300	Feb...	469,150	Feb...	58,600
Mar...	98,342	Mar...	479,550	Mar...	517,750	Mar...	701,650
April...	39,722	April...	369,300	April...	471,700	April...	677,900
May...	70,175	May...	417,650	May...	608,050	May...	908,500
June...	67,233	June...	455,800	June...	655,900	June...	523,800
July...	51,401	July...	492,100	July...	431,400	July...	395,900
Aug...	48,883	Aug...	325,450	Aug...	556,400	Aug...	557,700
Sept...	89,883	Sept...	497,300	Sept...	520,850	Sept...	410,500
Oct...	200,585	Oct...	433,900	Oct...	748,100	Oct...	441,100
Nov...	189,025	Nov...	508,100	Nov...	566,500	Nov...	696,300
Dec...	237,125	Dec...	406,700	Dec...	937,250	Dec...	475,300
	1,209,149		5,317,550		7,125,800		6,862,750
1871.		1873.		1875.		1877.	
Jan...	219,375	Jan...	413,050	Jan...	651,700	Jan...	877,200
Feb...	211,150	Feb...	341,650	Feb...	537,700	Feb...	1,324,300
Mar...	447,700	Mar...	739,850	Mar...	588,700	Mar...	1,948,200
April...	153,690	April...	380,500	April...	891,850	April...	1,203,100
May...	350,183	May...	373,550	May...	723,100	May...	998,200
June...	331,150	June...	401,000	June...	809,500	June...	996,600
July...	273,000	July...	326,100	July...	699,850	July...	619,600
Aug...	327,600	Aug...	313,150	Aug...	468,750	Aug...	889,900
Sept...	350,750	Sept...	366,950	Sept...	596,200	Sept...	911,100
Oct...	450,350	Oct...	431,550	Oct...	883,700	Oct...	1,161,500
Nov...	343,314	Nov...	551,500	Nov...	500,700	Nov...	1,099,300
Dec...	370,050	Dec...	458,100	Dec...	447,200	Dec...	1,389,200
	3,858,912		5,103,250		7,799,250		13,548,200

We here see that calling the present crop 4,500,000 bales, the future sales in New York during the last twelve months were about three times the total year's production, representing, at 10c. per pound, an aggregate value of about \$598,400,000.

Yet this is not the whole measure of the change recent

times have witnessed; a feature perhaps even more surprising, the twin growth of this future-delivery business, is the effort made and the expense incurred in obtaining facts of interest to the trade, and the wonderful extent and accuracy of those facts. In the ante-war times the only interchange of thought was between a few brokers who were accustomed from day to day to meet on 'Change and communicate to each other points of information. Out of it all, however, nothing could be gathered sufficient even to form an official market. Different newspapers often varied widely in their quotations. The Journal of Commerce published the prices made up by one firm of cotton brokers, the Courier and Enquirer those made by another firm, and the Herald those of still another. When, in 1865, the CHRONICLE began the first effort at organization, by grouping together cotton intelligence from all parts of the world in a weekly report, although judged by present standards the early effort was comparatively meagre, yet it was a considerable advance and an indication of an existing want which has since found expression in the establishment of Cotton Exchanges all through the country, and in the remarkable growth of a complete system of obtaining information. How visionary would the man have been thought who, in 1866, when the cable was first laid, should have prophesied that the trade here would in a few years be in the receipt of several reports a day by cable from Liverpool, Manchester, Havre, &c., and by telegraph from all Southern towns of any importance, conveying information with regard to every changing condition of the growing crops, every movement of the staple, and every fluctuation, however trifling, in the markets. And yet this is only a portion of the data daily and weekly gathered and distributed by our Cotton Exchanges.

These facts, so briefly set out, show the extent of the revolution which has been effected in business methods. But the modifications made have only kept pace with, and been mere adjustments to, the changes which have taken place in physical science. Years since, when it required twenty to thirty days to reach Liverpool, it was impossible to base a venture on facts at the moment existing. New Orleans, as the centre of production, might be ten days or more from us, while the interior was many days from New Orleans; and, on the other hand, the market for consumption was twenty or thirty days in the opposite direction. To bring these distant points together, and to adjust the relation between supply and demand, so as to be able to act intelligently either as buyer or seller, required time; and even then the chances of a variation in the conditions before the operation was completed were great, but must be assumed. Under such circumstances, action could only be slow. But when these distances were all very greatly reduced by the substitution of railroad and steamship for stage-coach and sails, mercantile movements necessarily quickened, and with the telegraph and cable brought into use, no other system than the present would be possible.

It is folly, therefore, to decry future-delivery business. To direct and control it, and, so far as possible, strip it of evil, is of course needful; but one might as well attempt to talk down the use of the cable and telegraph as to seek to suppress a system which is a voluntary outgrowth of such quickened communication. Besides, it has great uses. Through it the spinner is enabled, with confidence, to sell his year's manufacture in advance, and ensure a steady trade: for he can as soon as the goods have been promised, buy contracts based on approved samples, for the delivery

as he needs it, of the cotton which is to make them. If he could not do this, he would be compelled either to purchase at once, requiring a much larger capital for his business and a loss of interest to be added to the price of his goods, or else await the moment when he needs the cotton, and take the risk of buying at whatever price may rule at the time. These are the days of very small profits; the loss of interest or a slight rise in the staple would in many cases absorb it all, or turn what promised to be remunerative into an actual loss. Furthermore, this business in futures encourages and assists the manufacturer with limited resources. The tendency in this country now is for capital to accumulate in the hands of a few. Business naturally moves towards the larger houses; their superior credit, beyond criticism as it is, and their greater means, give them immense advantages, so that the number of small traders is constantly decreasing. Such an absorption of minor firms is very harmful, and anything that benefits them or ensures them a stronger hold is an advantage to the country at large. Then, again, the future-business may be of great benefit to the producer. He can select his time for disposing of his crop, and if he desires can find a purchaser for it months before it is harvested. This gives him a choice of time for selling, and a greater chance of profit for his year's labor. Finally, the opportunity the spinner and producer secure of purchasing and selling when they deem it best, should tend to so distribute transactions through the year as to impart to the cotton market greater stability. Few conditions are more vexatious, and not unfrequently disastrous, to the spinner, than fluctuations in the price of the raw material. A rise is more likely than not to catch him with his contracts for goods made and his cotton unbought, while a decline depreciates all his unsold stock and deadens the goods market everywhere.

A price as nearly uniform as possible reduces the risks of his business to a minimum, and makes it what it should be, an open trial of skill and economy in manufacture.

But notwithstanding all these advantages which are connected with and grow out of this department of the trade, there is a great evil fostered by it; we refer to a species of speculation extensively practiced—so extensively, in fact, that it exceeds in aggregate amount the legitimate future sales—and which we are far from advocating or justifying. But to condemn the system because it admits of perversion from its true purposes, would be very unreasonable. So long as there are crops to be raised, and such uncertain elements to be forejudged as acreage, weather, condition and consumption, we shall find those who, trusting in their information and foresight, will trade on the probabilities. But such dealers are limited in number, and generally conservative in action. With, however, this kind of business once begun, it soon finds almost numberless followers of various classes:—one takes a turn for a point or two, another hammers the market with a persistency worthy of a better cause, and still another strives to screw it up by a cornering movement. All this is, of course, objectionable, but what can be done about it, except let the participators punish themselves. They are on both sides of the market, and on the average have very slight influence over it, getting a little success for a time, but generally after a brief existence are snuffed out. The worst feature of it is, that the South is constantly putting the gains on the crops it raises into this same hopper which turns out chaff only. A broker told us a short time since that ninety-nine out of every one hundred speculative accounts he had opened showed a loss to his clients; this is probably a fair sample of the whole business. It is a lottery in which every chance is against the ticket-holder. It will be a

blessed day for the South when it really learns this lesson and acts in the light of it.

An important change in the business in futures has been determined upon the past year, through the conference at Liverpool. We refer to the fixing of the weight at New York and Liverpool of 100 bales at 43,200 pounds. Heretofore the average conventional weight in the New York market for deliveries under a contract has always been considered 450 pounds per bale, but at Liverpool the requirement has been that the bales should average within 5 per cent of 432 pounds. A fixed weight is very desirable. Under the old Liverpool rule, sellers regulated their deliveries according as their contract was a profitable or a losing one. The arrangement now agreed upon will, when carried into effect, limit the possible variation from the quantity contracted for to half a bale, or one half of one per cent, and therefore prevent any advantage being taken by the seller; and further, it facilitates the operations of the English spinner, enabling him to cover his sales of yarn, which are made in pounds weight, by the purchase of the exact weight of cotton required for that purpose.

As the fluctuations in prices for the years since this description of business was begun, are of much interest, we have compiled them, beginning with September 1, 1870, and giving the highest and lowest prices of the sales each week for each month down to September 1, 1877, all of which will be found in the following nineteen pages. The reader should remember in using these figures that previous to September 1, 1875, future transactions were based on Low Middling Uplands, old classification; since that time they have been based on Middling Uplands, new classification. We shall explain the change in classification subsequently when speaking of the spot quotations.

FUTURE DELIVERY SALES FOR YEAR 1870-71, IN TWO PAGES.—Page 1.

Weekly Range of Prices of Sales for Months Named Below.

Sales during week ending—	Prices of	Prices of	Prices of	Prices of	Prices of	Prices of	Prices of	Prices of	Prices of
Sept. 2, 70.	Sales for Aug.	Sales for Sept.	Sales for Oct.	Sales for Nov.	Sales for Dec.	Sales for Jan.	Sales for Feb.	Sales for March.	Sales for April.
" 9	18 1/2	17 1/2	17 1/2	17 1/2	17 1/2	16 1/2	16 1/2	16 1/2	16 1/2
" 16	18 1/2	17 1/2	17 1/2	17 1/2	17 1/2	16 1/2	16 1/2	16 1/2	16 1/2
" 23	18 1/2	17 1/2	17 1/2	17 1/2	17 1/2	16 1/2	16 1/2	16 1/2	16 1/2
" 30	18 1/2	17 1/2	17 1/2	17 1/2	17 1/2	16 1/2	16 1/2	16 1/2	16 1/2
Oct. 7	18 1/2	17 1/2	17 1/2	17 1/2	17 1/2	16 1/2	16 1/2	16 1/2	16 1/2
" 14	18 1/2	17 1/2	17 1/2	17 1/2	17 1/2	16 1/2	16 1/2	16 1/2	16 1/2
" 21	18 1/2	17 1/2	17 1/2	17 1/2	17 1/2	16 1/2	16 1/2	16 1/2	16 1/2
" 28	18 1/2	17 1/2	17 1/2	17 1/2	17 1/2	16 1/2	16 1/2	16 1/2	16 1/2
Nov. 4	18 1/2	17 1/2	17 1/2	17 1/2	17 1/2	16 1/2	16 1/2	16 1/2	16 1/2
" 11	18 1/2	17 1/2	17 1/2	17 1/2	17 1/2	16 1/2	16 1/2	16 1/2	16 1/2
" 18	18 1/2	17 1/2	17 1/2	17 1/2	17 1/2	16 1/2	16 1/2	16 1/2	16 1/2
" 25	18 1/2	17 1/2	17 1/2	17 1/2	17 1/2	16 1/2	16 1/2	16 1/2	16 1/2
Dec. 2	18 1/2	17 1/2	17 1/2	17 1/2	17 1/2	16 1/2	16 1/2	16 1/2	16 1/2
" 9	18 1/2	17 1/2	17 1/2	17 1/2	17 1/2	16 1/2	16 1/2	16 1/2	16 1/2
" 16	18 1/2	17 1/2	17 1/2	17 1/2	17 1/2	16 1/2	16 1/2	16 1/2	16 1/2
" 23	18 1/2	17 1/2	17 1/2	17 1/2	17 1/2	16 1/2	16 1/2	16 1/2	16 1/2
" 30	18 1/2	17 1/2	17 1/2	17 1/2	17 1/2	16 1/2	16 1/2	16 1/2	16 1/2
Jan. 6, 71.	18 1/2	17 1/2	17 1/2	17 1/2	17 1/2	16 1/2	16 1/2	16 1/2	16 1/2
" 13	18 1/2	17 1/2	17 1/2	17 1/2	17 1/2	16 1/2	16 1/2	16 1/2	16 1/2
" 20	18 1/2	17 1/2	17 1/2	17 1/2	17 1/2	16 1/2	16 1/2	16 1/2	16 1/2
" 27	18 1/2	17 1/2	17 1/2	17 1/2	17 1/2	16 1/2	16 1/2	16 1/2	16 1/2
Feb. 3	18 1/2	17 1/2	17 1/2	17 1/2	17 1/2	16 1/2	16 1/2	16 1/2	16 1/2
" 10	18 1/2	17 1/2	17 1/2	17 1/2	17 1/2	16 1/2	16 1/2	16 1/2	16 1/2
" 17	18 1/2	17 1/2	17 1/2	17 1/2	17 1/2	16 1/2	16 1/2	16 1/2	16 1/2
" 24	18 1/2	17 1/2	17 1/2	17 1/2	17 1/2	16 1/2	16 1/2	16 1/2	16 1/2
Mar. 3	18 1/2	17 1/2	17 1/2	17 1/2	17 1/2	16 1/2	16 1/2	16 1/2	16 1/2

Prices of sales for May—September 23, 17. Prices of sales for Dec.—March 13, 11 1/2. Prices of sales for Jan.—March 3, 11 1/2.

FUTURE DELIVERY SALES FOR YEAR 1870-71, IN TWO PAGES.—Page 2.

Weekly Range of Prices of Sales for Months Named Below.

Sales during week ending—	Prices of Sales for Mar.	Prices of Sales for April.	Prices of Sales for May.	Prices of Sales for June.	Prices of Sales for July.	Prices of Sales for Aug.	Prices of Sales for Sept.	Prices of Sales for Oct.	Prices of Sales for Nov.	Prices of Sales for Dec.	Prices of Sales for Jan.	Prices of Sales for Feb.	Prices of Sales for Mar.
Mar. 10-11	13 3/4 @ 13	13 7/8 @ 13 1/2	14 @ 13 3/4	14 @ 13 1/2	14 @ 13 1/2	14 @ 13 1/2	14 @ 13 1/2	14 @ 13 1/2	14 @ 13 1/2	14 @ 13 1/2	14 @ 13 1/2	14 @ 13 1/2	14 @ 13 1/2
" 17	14 1/2 @ 13 3/4	14 1/2 @ 13 3/4	14 1/2 @ 13 3/4	14 1/2 @ 13 3/4	14 1/2 @ 13 3/4	14 1/2 @ 13 3/4	14 1/2 @ 13 3/4	14 1/2 @ 13 3/4	14 1/2 @ 13 3/4	14 1/2 @ 13 3/4	14 1/2 @ 13 3/4	14 1/2 @ 13 3/4	14 1/2 @ 13 3/4
" 24	14 3/4 @ 13 3/4	14 3/4 @ 13 3/4	14 3/4 @ 13 3/4	14 3/4 @ 13 3/4	14 3/4 @ 13 3/4	14 3/4 @ 13 3/4	14 3/4 @ 13 3/4	14 3/4 @ 13 3/4	14 3/4 @ 13 3/4	14 3/4 @ 13 3/4	14 3/4 @ 13 3/4	14 3/4 @ 13 3/4	14 3/4 @ 13 3/4
" 31	14 3/4 @ 14	14 3/4 @ 13 3/4	14 3/4 @ 13 3/4	14 3/4 @ 13 3/4	14 3/4 @ 13 3/4	14 3/4 @ 13 3/4	14 3/4 @ 13 3/4	14 3/4 @ 13 3/4	14 3/4 @ 13 3/4	14 3/4 @ 13 3/4	14 3/4 @ 13 3/4	14 3/4 @ 13 3/4	14 3/4 @ 13 3/4
Apr. 7	14 @ 13 1/2	13 7/8 @ 13 1/2	13 7/8 @ 13 1/2	13 7/8 @ 13 1/2	13 7/8 @ 13 1/2	13 7/8 @ 13 1/2	13 7/8 @ 13 1/2	13 7/8 @ 13 1/2	13 7/8 @ 13 1/2	13 7/8 @ 13 1/2	13 7/8 @ 13 1/2	13 7/8 @ 13 1/2	13 7/8 @ 13 1/2
" 14	14 @ 13 3/4	13 7/8 @ 13 3/4	13 7/8 @ 13 1/2	13 7/8 @ 13 1/2	13 7/8 @ 13 1/2	13 7/8 @ 13 1/2	13 7/8 @ 13 1/2	13 7/8 @ 13 1/2	13 7/8 @ 13 1/2	13 7/8 @ 13 1/2	13 7/8 @ 13 1/2	13 7/8 @ 13 1/2	13 7/8 @ 13 1/2
" 21	14 @ 13 3/4	13 7/8 @ 13 3/4	13 7/8 @ 13 3/4	13 7/8 @ 13 3/4	13 7/8 @ 13 3/4	13 7/8 @ 13 3/4	13 7/8 @ 13 3/4	13 7/8 @ 13 3/4	13 7/8 @ 13 3/4	13 7/8 @ 13 3/4	13 7/8 @ 13 3/4	13 7/8 @ 13 3/4	13 7/8 @ 13 3/4
" 28	14 @ 13 3/4	13 7/8 @ 13 3/4	13 7/8 @ 13 3/4	13 7/8 @ 13 3/4	13 7/8 @ 13 3/4	13 7/8 @ 13 3/4	13 7/8 @ 13 3/4	13 7/8 @ 13 3/4	13 7/8 @ 13 3/4	13 7/8 @ 13 3/4	13 7/8 @ 13 3/4	13 7/8 @ 13 3/4	13 7/8 @ 13 3/4
May 5	14 1/2 @ 11 3/4	11 1/2 @ 13 7/8	11 1/2 @ 11	11 1/2 @ 11 1/2	11 1/2 @ 11 1/2	11 1/2 @ 11 1/2	11 1/2 @ 11 1/2	11 1/2 @ 11 1/2	11 1/2 @ 11 1/2	11 1/2 @ 11 1/2	11 1/2 @ 11 1/2	11 1/2 @ 11 1/2	11 1/2 @ 11 1/2
" 12	15 3/4 @ 14 3/4	15 3/4 @ 14 3/4	15 3/4 @ 14 3/4	15 3/4 @ 14 3/4	15 3/4 @ 14 3/4	15 3/4 @ 14 3/4	15 3/4 @ 14 3/4	15 3/4 @ 14 3/4	15 3/4 @ 14 3/4	15 3/4 @ 14 3/4	15 3/4 @ 14 3/4	15 3/4 @ 14 3/4	15 3/4 @ 14 3/4
" 19	15 7/8 @ 14 3/4	15 7/8 @ 14 3/4	15 7/8 @ 14 3/4	15 7/8 @ 14 3/4	15 7/8 @ 14 3/4	15 7/8 @ 14 3/4	15 7/8 @ 14 3/4	15 7/8 @ 14 3/4	15 7/8 @ 14 3/4	15 7/8 @ 14 3/4	15 7/8 @ 14 3/4	15 7/8 @ 14 3/4	15 7/8 @ 14 3/4
" 26	16 1/2 @ 15 1/2	16 1/2 @ 15 1/2	16 1/2 @ 15 1/2	16 1/2 @ 15 1/2	16 1/2 @ 15 1/2	16 1/2 @ 15 1/2	16 1/2 @ 15 1/2	16 1/2 @ 15 1/2	16 1/2 @ 15 1/2	16 1/2 @ 15 1/2	16 1/2 @ 15 1/2	16 1/2 @ 15 1/2	16 1/2 @ 15 1/2
June 2	16 1/2 @ 15 1/2	16 1/2 @ 15 1/2	16 1/2 @ 15 1/2	16 1/2 @ 15 1/2	16 1/2 @ 15 1/2	16 1/2 @ 15 1/2	16 1/2 @ 15 1/2	16 1/2 @ 15 1/2	16 1/2 @ 15 1/2	16 1/2 @ 15 1/2	16 1/2 @ 15 1/2	16 1/2 @ 15 1/2	16 1/2 @ 15 1/2
" 9	19 1/2 @ 16 7/8	20 @ 17 3/4	20 @ 17 3/4	20 @ 17 3/4	20 @ 17 3/4	20 @ 17 3/4	20 @ 17 3/4	20 @ 17 3/4	20 @ 17 3/4	20 @ 17 3/4	20 @ 17 3/4	20 @ 17 3/4	20 @ 17 3/4
" 16	19 7/8 @ 18 1/2	20 1/2 @ 18 1/2	20 3/4 @ 18 1/2	20 3/4 @ 18 1/2	20 3/4 @ 18 1/2	20 3/4 @ 18 1/2	20 3/4 @ 18 1/2	20 3/4 @ 18 1/2	20 3/4 @ 18 1/2	20 3/4 @ 18 1/2	20 3/4 @ 18 1/2	20 3/4 @ 18 1/2	20 3/4 @ 18 1/2
" 23	20 1/4 @ 18 1/2	20 1/2 @ 18 1/2	20 3/4 @ 18 1/2	20 3/4 @ 18 1/2	20 3/4 @ 18 1/2	20 3/4 @ 18 1/2	20 3/4 @ 18 1/2	20 3/4 @ 18 1/2	20 3/4 @ 18 1/2	20 3/4 @ 18 1/2	20 3/4 @ 18 1/2	20 3/4 @ 18 1/2	20 3/4 @ 18 1/2
" 30	19 3/4 @ 18 3/4	20 1/2 @ 18 3/4	20 3/4 @ 18 3/4	20 3/4 @ 18 3/4	20 3/4 @ 18 3/4	20 3/4 @ 18 3/4	20 3/4 @ 18 3/4	20 3/4 @ 18 3/4	20 3/4 @ 18 3/4	20 3/4 @ 18 3/4	20 3/4 @ 18 3/4	20 3/4 @ 18 3/4	20 3/4 @ 18 3/4
July 7	20 1/2 @ 19 3/4	20 3/4 @ 19 3/4	20 3/4 @ 19 3/4	20 3/4 @ 19 3/4	20 3/4 @ 19 3/4	20 3/4 @ 19 3/4	20 3/4 @ 19 3/4	20 3/4 @ 19 3/4	20 3/4 @ 19 3/4	20 3/4 @ 19 3/4	20 3/4 @ 19 3/4	20 3/4 @ 19 3/4	20 3/4 @ 19 3/4
" 14	20 5/8 @ 19 3/4	21 @ 19 3/4	20 3/4 @ 19 3/4	20 3/4 @ 19 3/4	20 3/4 @ 19 3/4	20 3/4 @ 19 3/4	20 3/4 @ 19 3/4	20 3/4 @ 19 3/4	20 3/4 @ 19 3/4	20 3/4 @ 19 3/4	20 3/4 @ 19 3/4	20 3/4 @ 19 3/4	20 3/4 @ 19 3/4
" 21	20 @ 19 5/8	20 1/2 @ 19 5/8	20 3/4 @ 19 5/8	20 3/4 @ 19 5/8	20 3/4 @ 19 5/8	20 3/4 @ 19 5/8	20 3/4 @ 19 5/8	20 3/4 @ 19 5/8	20 3/4 @ 19 5/8	20 3/4 @ 19 5/8	20 3/4 @ 19 5/8	20 3/4 @ 19 5/8	20 3/4 @ 19 5/8
" 28	19 1/2 @ 18 7/8	19 1/2 @ 18 7/8	19 1/2 @ 18 7/8	19 1/2 @ 18 7/8	19 1/2 @ 18 7/8	19 1/2 @ 18 7/8	19 1/2 @ 18 7/8	19 1/2 @ 18 7/8	19 1/2 @ 18 7/8	19 1/2 @ 18 7/8	19 1/2 @ 18 7/8	19 1/2 @ 18 7/8	19 1/2 @ 18 7/8
Aug. 4	18 3/4 @ 18 1/2	18 3/4 @ 18 1/2	18 3/4 @ 18 1/2	18 3/4 @ 18 1/2	18 3/4 @ 18 1/2	18 3/4 @ 18 1/2	18 3/4 @ 18 1/2	18 3/4 @ 18 1/2	18 3/4 @ 18 1/2	18 3/4 @ 18 1/2	18 3/4 @ 18 1/2	18 3/4 @ 18 1/2	18 3/4 @ 18 1/2
" 11	18 1/2 @ 17 1/4	18 1/2 @ 17 1/4	18 1/2 @ 17 1/4	18 1/2 @ 17 1/4	18 1/2 @ 17 1/4	18 1/2 @ 17 1/4	18 1/2 @ 17 1/4	18 1/2 @ 17 1/4	18 1/2 @ 17 1/4	18 1/2 @ 17 1/4	18 1/2 @ 17 1/4	18 1/2 @ 17 1/4	18 1/2 @ 17 1/4
" 18	17 3/8 @ 17	18 @ 17	18 @ 17	18 @ 17	18 @ 17	18 @ 17	18 @ 17	18 @ 17	18 @ 17	18 @ 17	18 @ 17	18 @ 17	18 @ 17
" 25	18 1/2 @ 17 3/8	18 1/2 @ 17 3/8	18 1/2 @ 17 3/8	18 1/2 @ 17 3/8	18 1/2 @ 17 3/8	18 1/2 @ 17 3/8	18 1/2 @ 17 3/8	18 1/2 @ 17 3/8	18 1/2 @ 17 3/8	18 1/2 @ 17 3/8	18 1/2 @ 17 3/8	18 1/2 @ 17 3/8	18 1/2 @ 17 3/8

Prices of sales for December.—March 21, 14 1/2; April 11, 13 3/4; April 21, 14 1/2; May 5, 14 1/2. Prices of sales for January.—March 24, 14 3/4; April 14, 14 3/4; May 12, 14 3/4. Prices of sales for March.—July 28, 18 3/4.

FUTURE DELIVERY SALES FOR YEAR 1871-72, IN TWO PLACES.—Page 1.

Weekly Range of Prices of Sales for Months Named Below.

Sales during—	Prices of	Prices of	Prices of	Prices of	Prices of	Prices of	Prices of	Prices of	Prices of	Prices of	Prices of
week end—	Sales for Sept.	Sales for Oct.	Sales for Nov.	Sales for Dec.	Sales for Jan.	Sales for Feb.	Sales for March.	Sales for April.	Sales for May.	Sales for June.	Sales for July.
Sept. 1, 71.	1878	1978	1978	1978	1978	1978	1978	1978	1978	1978	1978
" 8	20	20	20	20	20	20	20	20	20	20	20
" 15	20	20	20	20	20	20	20	20	20	20	20
" 22	20	20	20	20	20	20	20	20	20	20	20
" 29	20	20	20	20	20	20	20	20	20	20	20
Oct. 6	20	20	20	20	20	20	20	20	20	20	20
" 13	20	20	20	20	20	20	20	20	20	20	20
" 20	20	20	20	20	20	20	20	20	20	20	20
" 27	20	20	20	20	20	20	20	20	20	20	20
Nov. 3	20	20	20	20	20	20	20	20	20	20	20
" 10	20	20	20	20	20	20	20	20	20	20	20
" 17	20	20	20	20	20	20	20	20	20	20	20
" 24	20	20	20	20	20	20	20	20	20	20	20
Dec. 1	20	20	20	20	20	20	20	20	20	20	20
" 8	20	20	20	20	20	20	20	20	20	20	20
" 15	20	20	20	20	20	20	20	20	20	20	20
" 22	20	20	20	20	20	20	20	20	20	20	20
" 29	20	20	20	20	20	20	20	20	20	20	20
Jan. 5, 72.	20	20	20	20	20	20	20	20	20	20	20
" 12	20	20	20	20	20	20	20	20	20	20	20
" 19	20	20	20	20	20	20	20	20	20	20	20
" 26	20	20	20	20	20	20	20	20	20	20	20
Feb. 2	20	20	20	20	20	20	20	20	20	20	20
" 9	20	20	20	20	20	20	20	20	20	20	20
" 16	20	20	20	20	20	20	20	20	20	20	20
" 23	20	20	20	20	20	20	20	20	20	20	20
" 30	20	20	20	20	20	20	20	20	20	20	20
Mar. 1	20	20	20	20	20	20	20	20	20	20	20

Prices of sales for Oct.—March 1, 20 @.....

FUTURE DELIVERY SALES FOR YEAR 1872-73, IN TWO PAGES.—Page 1.

Weekly Range of Prices of Sales for Months Named Below.

Sales during week ending—	Prices of Sales for Sept.	Prices of Sales for Oct.	Prices of Sales for Nov.	Prices of Sales for Dec.	Prices of Sales for Jan.	Prices of Sales for Feb.	Prices of Sales for March.	Prices of Sales for April.	Prices of Sales for May.	Prices of Sales for June.	Prices of Sales for July.	Prices of Sales for Aug.	Prices of Sales for Sept.
Sept. 6, 72.	2054 a 20116	2054 a 1914	20 a 19	20 a 19	2054 a 1916	1934 a 1834	1934 a 1834	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916
" 13	2054 a 1916	1916 a 1834	19 a 1834	19 a 1834	19 a 1834	19 a 1834	19 a 1834	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916
" 20	1916 a 1834	19 a 1834	19 a 1834	19 a 1834	19 a 1834	19 a 1834	19 a 1834	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916
Oct. 4	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916
" 11	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916
" 18	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916
" 25	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916
Nov. 1	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916
" 8	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916
" 15	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916
" 22	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916
" 29	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916
Dec. 6	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916
" 13	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916
" 20	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916
" 27	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916
Jan. 3, 73.	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916
" 10	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916
" 17	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916
" 24	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916
" 31	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916
Feb. 7	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916
" 14	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916
" 21	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916
" 28	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	1834 a 1834	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916	2054 a 1916

Prices of sales for May.—Oct. 1, 21 a 2054. Prices of sales for June.—Nov. 1, 2054.

FUTURE DELIVERY SALES FOR YEAR 1872-73, IN TWO PAGES.—Page 2.

Weekly Range of Prices for Months Named Below.

Sales during week ending—	Prices of Sales for Mch.	Prices of Sales for April.	Prices of Sales for May.	Prices of Sales for June.	Prices of Sales for July.	Prices of Sales for Aug.	Prices of Sales for Sept.	Prices of Sales for Oct.	Prices of Sales for Nov.	Prices of Sales for Dec.	Prices of Sales for Jan.	Prices of Sales for Feb.	Prices of Sales for Mch.
Mch. 7, '73	2012 a 1914	2058 a 2078	21 a 202	21916 a 2078	1914 a 181516	1914 a 181516	1914 a 181516	1914 a 181516	1914 a 181516	1914 a 181516	1914 a 181516	1914 a 181516	1914 a 181516
" 11 "	19116 a 181516	2035 a 1915	2042 a 1916	191516 a 1814	191516 a 181516	191516 a 181516	191516 a 181516	191516 a 181516	191516 a 181516	191516 a 181516	191516 a 181516	191516 a 181516	191516 a 181516
" 21 "	19 a 1778	1916 a 1778	1916 a 18	191516 a 1814	191516 a 181516	191516 a 181516	191516 a 181516	191516 a 181516	191516 a 181516	191516 a 181516	191516 a 181516	191516 a 181516	191516 a 181516
" 28 "	181516 a 181516	19 a 1858	1915 a 184	191516 a 1814	191516 a 181516	191516 a 181516	191516 a 181516	191516 a 181516	191516 a 181516	191516 a 181516	191516 a 181516	191516 a 181516	191516 a 181516
April 4	181516 a 181516	1916 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815
" 11 "	19116 a 1834	1915 a 1914	1915 a 1914	1915 a 1914	1915 a 1914	1915 a 1914	1915 a 1914	1915 a 1914	1915 a 1914	1915 a 1914	1915 a 1914	1915 a 1914	1915 a 1914
" 18 "	181516 a 181516	1915 a 181516	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815
" 23 "	181516 a 181516	181516 a 181516	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815
May 2	181516 a 181516	181516 a 181516	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815
" 9 "	181516 a 181516	181516 a 181516	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815
" 16 "	181516 a 181516	181516 a 181516	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815
" 23 "	181516 a 181516	181516 a 181516	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815
" 30 "	181516 a 181516	181516 a 181516	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815
June 6	181516 a 181516	1914 a 181516	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815	191516 a 1815
" 13 "	20116 a 181516	201516 a 181516	201516 a 181516	201516 a 181516	201516 a 181516	201516 a 181516	201516 a 181516	201516 a 181516	201516 a 181516	201516 a 181516	201516 a 181516	201516 a 181516	201516 a 181516
" 20 "	2034 a 1914	203516 a 1914	203516 a 1914	203516 a 1914	203516 a 1914	203516 a 1914	203516 a 1914	203516 a 1914	203516 a 1914	203516 a 1914	203516 a 1914	203516 a 1914	203516 a 1914
" 27 "	203516 a 1914	203516 a 1914	203516 a 1914	203516 a 1914	203516 a 1914	203516 a 1914	203516 a 1914	203516 a 1914	203516 a 1914	203516 a 1914	203516 a 1914	203516 a 1914	203516 a 1914
July 3	2034 a 2034	2034 a 2034	2034 a 2034	2034 a 2034	2034 a 2034	2034 a 2034	2034 a 2034	2034 a 2034	2034 a 2034	2034 a 2034	2034 a 2034	2034 a 2034	2034 a 2034
" 11 "	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516
" 18 "	203516 a 2034	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516
" 25 "	203516 a 2034	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516	2034 a 191516
Aug. 1	20116 a 191516	1914 a 1914	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516
" 8 "	191516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516
" 15 "	1914 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516
" 22 "	1958 a 1914	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516
" 29 "	201516 a 191516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516	181516 a 181516

Prices of sales for Dec.—May 2, 174. Prices of sales for Feb.—June 20, 184.

FUTURE DELIVERY SALES FOR 2 YEAR 1875-76, IN FOUR PAGES.—Page 3.
Weekly Range of Prices of Sales for Months Named Below.

Sales during week ending— Mch. 3, 1876.	Prices of Sales for Feb. 12 ³ / ₄ a	Prices of Sales for March. 12 ³ / ₄ @ 12 11-32	Prices of Sales for April. 13 1-32 @ 12 ³ / ₄	Prices of Sales for May. 13 1-32 @ 12 29-32	Prices of Sales for June. 13 ³ / ₄ @ 13 ⁴ / ₄	Prices of Sales for July. 13 27-32 @ 13 15-32
" 10.....	12 31-32 @ 12 11-16	Sales for April. 13 ³ / ₄ @ 12 ³ / ₄	Sales for May. 13 7-16 @ 13 5-32	Sales for June. 13 11-16 @ 13 15-32	Sales for July. 13 29-32 @ 13 11-16	Sales for Aug. 14 1-16 @ 13 29-32
" 17.....	13 ³ / ₄ @ 12 15-16	13 5-16 @ 13 1-32	13 25-32 @ 13 11-32	13 27-32 @ 13 ³ / ₄	14 3-32 @ 13 27-32	14 ¹ / ₄ @ 14
" 24.....	13 ³ / ₄ @ 13 1-16	13 17-32 @ 13 1-16	13 25-32 @ 13 ³ / ₄	14 1-16 @ 13 11-16	14 3-32 @ 13 27-32	14 7-16 @ 14
" 31.....	13 21-32 @ 13 ³ / ₄	13 23-32 @ 13 ³ / ₄	13 31-32 @ 13 11-16	14 ¹ / ₄ @ 13 31-32	14 15-32 @ 13 14-16	14 19-32 @ 14 9-32
April 7.....	Sales for April. 13 9-16 @ 13 ³ / ₄	Sales for May. 13 25-32 @ 13 7-16	Sales for June. 14 1-32 @ 13 11-16	Sales for July. 11 7-32 @ 13 ³ / ₄	Sales for Aug. 11 ³ / ₄ @ 14	Sales for Sept. 11 ³ / ₄ @ 13 27-32
" 11.....	13 ³ / ₄ @ 12 15-16	13 17-32 @ 13 5-16	13 17-32 @ 13 5-16	14 1-32 @ 13 ³ / ₄	14 1-32 @ 13 ³ / ₄	13 13-16 @ 13 ³ / ₄
" 18.....	13 5-16 @ 13	13 13-32 @ 13 ³ / ₄	13 21-32 @ 13 11-32	13 ³ / ₄ @ 13 9-16	11 1-32 @ 13 ³ / ₄	13 ³ / ₄ @ 13 19-32
" 25.....	13 5-32 @ 12 25-32	13 3-16 @ 12 ³ / ₄	13 7-16 @ 12 15-16	13 ³ / ₄ @ 13 5-32	13 25-32 @ 13 5-16	13 19-32 @ 13 5-16
May 5.....	Sales for May. 12 13-16 @ 12 9-16	Sales for June. 13 1-16 @ 12 ³ / ₄	Sales for July. 13 ³ / ₄ @ 12 15-16	Sales for Aug. 13 13-32 @ 13 ³ / ₄	Sales for Sept. 13 ³ / ₄ @ 13 1-16	Sales for Oct. 13 ³ / ₄ @ 12 31-32
" 12.....	12 9-16 @ 12 3-16	12 13-16 @ 12 9-32	12 19-32 @ 12 ³ / ₄	13 ³ / ₄ @ 12 ³ / ₄	13 ³ / ₄ @ 12 19-32	12 31-32 @ 12 ³ / ₄
" 19.....	12 3-16 @ 12	12 ³ / ₄ @ 12 1-32	12 19-32 @ 12 ³ / ₄	12 19-32 @ 12 ³ / ₄	12 21-32 @ 12 19-32	12 9-16 @ 12 9-32
" 26.....	12 1-32 @ 11 ¹ / ₂	12 3-32 @ 11 7-16	12 5-16 @ 11 9-16	12 7-16 @ 11 11-16	12 ³ / ₄ @ 11 ³ / ₄	12 ³ / ₄ @ 11 ³ / ₄
June 2.....	12 5-16 @ 11 ¹ / ₂	12 11-32 @ 11 ¹ / ₂	12 17-32 @ 11 21-32	12 19-32 @ 11 13-16	12 ³ / ₄ @ 11 13-16	12 ³ / ₄ @ 11 21-32
" 9.....	Sales for June. 12 13-32 @ 11 5-32	Sales for July. 12 ³ / ₄ @ 11 21-32	Sales for Aug. 12 ³ / ₄ @ 11 21-32	Sales for Sept. 12 5-16 @ 11 ³ / ₄	Sales for Oct. 12 7-32 @ 11 19-32	Sales for Nov. 11 31-32 @ 11 17-32
" 16.....	12 3-32 @ 11 7 ¹ / ₂	12 3-16 @ 11 15-16	12 9-32 @ 12	12 7-32 @ 11 15-16	12 7-32 @ 11 19-32	11 31-32 @ 11 23-32
" 23.....	12 ³ / ₄ @ 11 15-16	12 9-32 @ 11 15-16	12 ³ / ₄ @ 12 1-32	12 ³ / ₄ @ 11 31-32	12 7-32 @ 11 ³ / ₄	11 31-32 @ 11 25-32
" 30.....	11 15-16 @ 11 23-32	11 29-32 @ 11 23-32	12 3-32 @ 11 27-32	12 3-32 @ 11 13-16	11 13-16 @ 11 ³ / ₄	11 23-32 @ 11 17-32
July 7.....	Sales for July. 11 27-32 @ 11 15-32	Sales for Aug. 12 1-16 @ 11 15-32	Sales for Sept. 11 13-16 @ 11 ³ / ₄	Sales for Oct. 11 ³ / ₄ @ 11 7-32	Sales for Nov. 11 ³ / ₄ @ 11 ³ / ₄	Sales for Dec. 11 ³ / ₄ @ 11 ³ / ₄
" 11.....	11 15-16 @ 11 17-32	11 31-32 @ 11 ¹ / ₂	11 23-32 @ 11 13-32	11 15-32 @ 11 ³ / ₄	11 11-32 @ 11 ³ / ₄	11 ³ / ₄ @ 11 3-16
" 18.....	11 13-16 @ 11 21-32	11 7 ¹ / ₂ @ 11 9-16	11 23-32 @ 11 9-16	11 15-32 @ 11 9-32	11 11-32 @ 11 3-16	11 11-32 @ 11 ³ / ₄
" 24.....	11 ³ / ₄ @ 11 21-32	11 ³ / ₄ @ 11 ³ / ₄	11 ³ / ₄ @ 11 9-16	11 9-16 @ 11 13-32	11 15-32 @ 11 11-32	11 15-32 @ 11 11-32
Aug. 1.....	12 ³ / ₄ @ 12 15-32	12 5-16 @ 11 ³ / ₄	12 15-16 @ 11 13-32	11 ³ / ₄ @ 11 15-32	11 21-32 @ 11 13-32	11 11-16 @ 11 7-16
" 11.....	Sales for Aug. 12 15-32 @ 12 5-32	Sales for Sept. 12 5-16 @ 11 ³ / ₄	Sales for Oct. 11 31-32 @ 11 21-32	Sales for Nov. 11 ³ / ₄ @ 11 19-32	Sales for Dec. 11 ³ / ₄ @ 11 19-32	Sales for Jan. 12 1-16 @ 11 23-32
" 18.....	12 9-16 @ 12 ³ / ₄	12 5-16 @ 11 ³ / ₄	11 29-32 @ 11 11-32	11 13-16 @ 11 7-16	11 13-16 @ 11 7-16	11 29-32 @ 11 17-32
" 25.....	12 3-16 @ 11 ³ / ₄	11 15-16 @ 11 ³ / ₄	11 15-16 @ 11 ³ / ₄	11 ³ / ₄ @ 11 7-16	11 ³ / ₄ @ 11 11-32	11 ³ / ₄ @ 11 7-16

FUTURE DELIVERY SALES FOR YEAR 1876-77, IN THREE PAGES.—Page 1.
Weekly Range of Prices of Sales for Months named Below.

Sales during week ending—	Prices of	Prices of	Prices of	Prices of	Prices of	Prices of
Sept. 1, 1876.	Sales for Aug.	Sales for Sept.	Sales for Oct.	Sales for Nov.	Sales for Dec.	Sales for Jan.
" 8.....	11 13-16 a 11 18	11 13-16 a 11 15-16	11 9-16 a 11 18	11 19-32 a 11 14	11 13-32 a 11 14	11 9-16 a 11 18
" 15.....	11 23-32 a 11 12	11 19-32 a 11 13-32	11 19-32 a 11 13-32	11 19-32 a 11 13-32	11 19-32 a 11 13-32	11 13-16 a 11 21-32
" 22.....	11 18 a 11 7-32	11 9-16 a 11 14	11 9-16 a 11 14	11 9-16 a 11 14	11 11-16 a 11 13-32	11 7 a 11 15 1/2
" 29.....	11 38 a 11 14	11 5-16 a 11 1-16	11 5-16 a 11 1-16	11 13-32 a 11 3-32	11 9-16 a 11 5-16	11 1-16 a 11 5 1/2
Oct. 6.....	11 1-16 a 10 13-16	11 13-32 a 10 31-32	11 7-32 a 11 1-16	11 13-32 a 11 13-32	11 9-16 a 11 14	11 23-32 a 11 7-16
" 13.....	11 3-32 a 10 7 1/2	11 7-32 a 11 1	11 9-32 a 11 3-32	11 11-32 a 11 7-32	11 17-32 a 11 13 1/2	11 23-32 a 11 9-16
" 20.....	10 31-32 a 10 34	11 1-16 a 10 7 1/2	11 9-32 a 11 1 1/2	11 15-32 a 11 5-16	11 25-32 a 11 15-32	11 31-32 a 11 15 1/2
" 27.....	11 a 10 34	11 1-32 a 10 27-32	11 9-32 a 11 3-32	11 15-32 a 11 5-16	11 11-16 a 11 17-32	11 27-32 a 11 23-32
Nov. 3.....	11 3-16 a 11 1-32	11 21-32 a 11 1-32	11 25-32 a 11 14	13 31-32 a 11 15-32	11 11-16 a 11 17-32	11 15-16 a 11 13 1/2
" 10.....	12 13-32 a 11 18	12 23-32 a 11 17 1/2	12 23-32 a 11 17 1/2	12 13-16 a 12 14	12 13-16 a 12 14	12 13-16 a 12 17-32
" 17.....	12 18 a 11 25-32	12 13-32 a 11 18 1/2	12 9-16 a 11 29-32	12 25-32 a 12 1-16	12 13-16 a 12 14	13 1/2 a 12 7-16
" 24.....	12 14 a 11 25-32	12 5-32 a 11 25-32	12 11-32 a 11 29-32	12 31-32 a 12 3-32	12 5 1/2 a 12 9-32	12 13-16 a 12 7-16
Dec. 1.....	12 18 a 12 14	12 11-32 a 12 1-32	12 11-32 a 12 5-32	12 11-16 a 12 11-32	12 7 1/2 a 12 12 1/2	13 a 12 11-16
" 8.....	12 11-32 a 11 31-32	12 9-16 a 12 3-32	12 11-16 a 12 14	12 27-32 a 12 7-16	13 1-32 a 12 21-32	13 7-32 a 12 15-16
" 15.....	12 13-32 a 12 3-16	12 5 1/2 a 12 5-16	12 13-16 a 12 17-32	13 a 12 23-32	13 5-32 a 12 15-16	13 11-32 a 13 1-16
" 22.....	12 15-32 a 12 7 1/2	12 17-32 a 12 9-32	12 7 1/2 a 12 17-32	13 3-32 a 12 23-32	13 9-32 a 12 29-32	13 15-32 a 13 1-16
" 29.....	12 18 a 12 5-16	12 23-32 a 12 14	13 a 12 11-16	13 1/2 a 12 7 1/2	13 15-32 a 13 1-16	13 15 1/2 a 13 11-32
Jan. 5, 1877.	13 9-32 a 12 19-32	13 13-32 a 12 13-32	13 13-32 a 12 13-32	13 13-16 a 13 15-32	11 9-32 a 13 5 1/2	14 7-16 a 14 1-32
" 12.....	13 13-32 a 13 13	13 21-32 a 13 3-32	14 a 13 14	13 13-16 a 13 15-32	13 11-32 a 13 13 1/2	14 13-32 a 13 13-16
" 19.....	13 11-32 a 13 1-32	13 5-16 a 13 1-16	13 19-32 a 13 9-32	13 13-16 a 13 14	13 11-32 a 13 23-32	14 13 1/2 a 13 7 1/2
" 26.....	13 13-32 a 13 3-16	13 7-16 a 13 14	13 23-32 a 13 9-32	13 11-32 a 13 21-32	11 5-32 a 13 29-32	14 9-32 a 13 7 1/2
Feb. 2.....	13 5-32 a 13 1-32	13 7-32 a 12 11-16	13 9-16 a 12 7 1/2	13 11-16 a 13 14	13 31-32 a 13 9-32	14 13 1/2 a 13 11-32
" 9.....	13 a 12 9-16	13 13-32 a 13 13	13 13-32 a 13 13	13 17-32 a 13 3-16	13 11-16 a 13 13 1/2	14 13-32 a 13 13-16
" 16.....	12 15-16 a 12 17-32	13 3-16 a 12 25-32	13 3-16 a 12 25-32	13 19-32 a 13 7-32	13 11-16 a 13 13 1/2	13 25-32 a 13 13 1/2
" 23.....	12 14 a 12 3-16	12 13-16 a 12 5-16	13 3-32 a 12 5-16	13 9-32 a 12 27-32	13 7-16 a 12 27-32	13 13-16 a 13 13 1/2
" 30.....	12 7-32 a 12 14	12 5 1/2 a 12 14	12 7 1/2 a 12 14	12 9 1/2 a 12 9-16	13 10 a 12 21-32	13 9-16 a 12 15-16
Mar. 6.....	12 7-32 a 12 14	12 5 1/2 a 12 14	12 7 1/2 a 12 14	12 9 1/2 a 12 9-16	13 10 a 12 21-32	13 15 a 12 25-32

FUTURE DELIVERY SALES FOR YEAR 1876-77, IN THREE PAGES.—PAGE 2.

Weekly Range of Prices of Sales for Months Named Below.

Sales during week ending Sept. 1, 1876.	Prices of Sales for Feb. 11 23-32 a 11 9-16	Prices of Sales for March. 11 27-32 a 11 23-32	Prices of Sales for April. 12 1-32 a 11 29-32	Prices of Sales for May. 12 3-16 a 12 1-24	Prices of Sales for June. 12 3-16 a 12 1-24	Prices of Sales for July. 12 3-16 a 12 1-24
" 8.....	13 31-32 a 11 13-16	12 5-32 a 12	12 11-32 a 12 3-16	12 3-16 a 12 1-24	12 3-16 a 12 1-24	12 3-16 a 12 1-24
" 15.....	12 1-16 a 11 13-16	12 7-16 a 11 7-32	12 3-16 a 12 3-16	12 3-16 a 12 1-24	12 3-16 a 12 1-24	12 3-16 a 12 1-24
" 22.....	11 27-32 a 11 11-16	12 1-16 a 11 13-16	12 3-16 a 12 3-16	12 3-16 a 12 1-24	12 3-16 a 12 1-24	12 3-16 a 12 1-24
" 29.....	11 7-16 a 11 13-16	12 1-16 a 11 13-16	12 3-16 a 12 3-16	12 3-16 a 12 1-24	12 3-16 a 12 1-24	12 3-16 a 12 1-24
Oct. 6.....	11 29-32 a 11 3-16	12 1-32 a 12 1-32	12 1-32 a 12 1-32	12 1-32 a 12 1-32	12 1-32 a 12 1-32	12 1-32 a 12 1-32
" 13.....	12 3-16 a 11 27-32	12 3-16 a 12 1-32	12 3-16 a 12 1-32	12 3-16 a 12 1-32	12 3-16 a 12 1-32	12 3-16 a 12 1-32
" 20.....	12 3-16 a 11 13-16	12 3-16 a 12 1-32	12 3-16 a 12 1-32	12 3-16 a 12 1-32	12 3-16 a 12 1-32	12 3-16 a 12 1-32
" 27.....	12 3-16 a 11 13-16	12 3-16 a 12 1-32	12 3-16 a 12 1-32	12 3-16 a 12 1-32	12 3-16 a 12 1-32	12 3-16 a 12 1-32
Nov. 3.....	12 3-16 a 12 3-16	12 3-16 a 12 3-16	12 3-16 a 12 3-16	12 3-16 a 12 3-16	12 3-16 a 12 3-16	12 3-16 a 12 3-16
" 10.....	13 11-32 a 12 23-32	13 17-32 a 12 27-32	13 17-32 a 12 27-32	13 17-32 a 12 27-32	13 17-32 a 12 27-32	13 17-32 a 12 27-32
" 17.....	13 5-16 a 12 23-32	13 15-32 a 12 27-32	13 15-32 a 12 27-32	13 15-32 a 12 27-32	13 15-32 a 12 27-32	13 15-32 a 12 27-32
" 21.....	13 11-32 a 12 23-32	13 3-32 a 12 25-32	13 3-32 a 12 25-32	13 3-32 a 12 25-32	13 3-32 a 12 25-32	13 3-32 a 12 25-32
Dec. 1.....	13 5-32 a 11 27-32	13 5-16 a 13	13 5-16 a 13	13 5-16 a 13	13 5-16 a 13	13 5-16 a 13
" 8.....	13 4-16 a 13	13 7-16 a 13 3-16	13 9-16 a 13 3-16	13 9-16 a 13 3-16	13 9-16 a 13 3-16	13 9-16 a 13 3-16
" 15.....	13 7-16 a 13 7-32	13 9-16 a 13 3-16	13 11-16 a 13 3-16	13 11-16 a 13 3-16	13 11-16 a 13 3-16	13 11-16 a 13 3-16
" 22.....	13 19-32 a 13 7-32	13 23-32 a 13 3-16	13 25-32 a 13 15-32	13 25-32 a 13 15-32	13 25-32 a 13 15-32	13 25-32 a 13 15-32
" 29.....	13 23-32 a 13 4	13 23-32 a 13 3-16	13 25-32 a 13 15-32	13 25-32 a 13 15-32	13 25-32 a 13 15-32	13 25-32 a 13 15-32
Jan. 5, 1877.	11 9-16 a 13 29-32	11 11-32 a 11 7-32	11 11-32 a 11 7-32	11 11-32 a 11 7-32	11 11-32 a 11 7-32	11 11-32 a 11 7-32
" 12.....	11 3-16 a 13 29-32	11 3-16 a 11 7-32	11 3-16 a 11 7-32	11 3-16 a 11 7-32	11 3-16 a 11 7-32	11 3-16 a 11 7-32
" 19.....	11 7-32 a 13 31-32	11 5-16 a 11 1-16	11 5-16 a 11 1-16	11 5-16 a 11 1-16	11 5-16 a 11 1-16	11 5-16 a 11 1-16
" 26.....	11 3-16 a 11 1-16	11 5-16 a 11 1-16	11 5-16 a 11 1-16	11 5-16 a 11 1-16	11 5-16 a 11 1-16	11 5-16 a 11 1-16
Feb. 2.....	11 3-32 a 13 3-16	11 9-32 a 13 11-16	11 9-32 a 13 11-16	11 9-32 a 13 11-16	11 9-32 a 13 11-16	11 9-32 a 13 11-16
" 9.....	13 27-32 a 13 17-32	13 3-16 a 13 4	13 3-16 a 13 4	13 3-16 a 13 4	13 3-16 a 13 4	13 3-16 a 13 4
" 16.....	13 15-16 a 13 9-16	13 19-32 a 13 5-16	13 19-32 a 13 5-16	13 19-32 a 13 5-16	13 19-32 a 13 5-16	13 19-32 a 13 5-16
" 23.....	13 3-16 a 13	13 9-32 a 12 15-16	13 9-32 a 12 15-16	13 9-32 a 12 15-16	13 9-32 a 12 15-16	13 9-32 a 12 15-16
Mar. 2.....	13 21 a 12 27-32	12 9-16 a 12 8	12 9-16 a 12 8	12 9-16 a 12 8	12 9-16 a 12 8	12 9-16 a 12 8

FUTURE DELIVERY SALES FOR YEAR 1876-77, IN THREE PAGES.—Page 3.
Weekly Range of Prices of Sales for Months Named Below.

Week ending	Prices of Sales for May	Prices of Sales for Apr	Prices of Sales for May	Prices of Sales for June	Prices of Sales for July	Prices of Sales for Aug	Prices of Sales for Sep	Prices of Sales for Oct	Prices of Sales for Nov	Prices of Sales for Dec	Prices of Sales for Jan
Mar. 9	12.60 a 12.23	12.84 a 12.33	13.00 a 12.51	13.15 a 12.61	13.25 a 12.73	13.27 a 12.79	12.99 a 12.51	12.72 a 12.28	12.53 a 12.19	12.37 a 12.15	
" 16	12.46 a 12.16	12.35 a 11.36	12.52 a 11.49	12.66 a 11.60	12.76 a 11.70	12.84 a 11.77	12.55 a 11.72	12.31 a 11.49	12.09 a 11.29	12.16 a 11.27	
" 23	11.42 a 11.27	11.70 a 11.15	11.88 a 11.30	12.00 a 11.48	12.10 a 11.58	12.17 a 11.65	11.97 a 11.60	11.70 a 11.33	11.60 a 11.20	11.60 a 11.22	
" 30	11.38 a 11.28	11.57 a 11.16	11.69 a 11.33	12.00 a 11.48	11.98 a 11.62	12.07 a 11.70	11.83 a 11.58	11.68 a 11.41	11.61 a 11.31	11.60 a 11.39	
Apr. 6	11.78 a 11.36	11.90 a 11.41	12.03 a 11.59	12.13 a 11.71	12.27 a 11.83	12.08 a 11.61	11.87 a 11.52	11.77 a 11.51	11.77 a 11.45	11.75 a 11.60	
" 13	11.69 a 11.30	11.49 a 11.33	11.63 a 11.39	11.77 a 11.61	11.87 a 11.71	11.79 a 11.60	11.54 a 11.48	11.45 a 11.35	11.41 a 11.37	11.53 a 11.50	
" 20	11.41 a 11.18	11.49 a 11.17	11.60 a 11.26	11.71 a 11.37	11.83 a 11.18	11.70 a 11.39	11.53 a 11.29	11.36 a 11.20	11.46 a 11.21	11.60 a 11.31	
" 27	11.37 a 10.94	11.41 a 10.80	11.54 a 10.85	11.66 a 10.95	11.76 a 11.09	11.61 a 11.10	11.50 a 10.98	11.36 a 10.88	11.26 a 10.91	11.53 a 11.10	
May 4	11.20 a 10.83	11.26 a 10.84	11.37 a 10.98	11.46 a 11.09	11.42 a 11.08	11.30 a 10.96	11.14 a 10.90	11.21 a 10.90	11.32 a 11.09	11.42 a 11.21	
" 11	11.22 a 10.83	11.28 a 10.84	11.39 a 10.98	11.47 a 11.07	11.49 a 11.06	11.29 a 10.95	11.15 a 10.87	11.48 a 10.90	11.45 a 11.05	11.48 a 11.24	
" 18	10.91 a 10.76	10.95 a 10.79	11.06 a 10.86	11.15 a 10.98	11.13 a 10.98	11.01 a 10.88	10.91 a 10.78	10.93 a 10.81	11.01 a 10.99	11.27 a 11.40	
" 25	11.12 a 10.87	11.18 a 10.82	11.21 a 10.92	11.30 a 11.01	11.20 a 11.00	11.10 a 10.73	10.95 a 10.79	10.97 a 10.81	11.11 a 10.97	11.27 a 11.15	
June 1	11.17 a 11.15	11.30 a 11.11	11.43 a 11.13	11.49 a 11.21	11.37 a 11.15	11.18 a 10.98	11.02 a 10.90	11.09 a 10.91	11.18 a 11.11	11.37 a 11.20	
July 6	11.75 a 11.30	11.80 a 11.31	11.87 a 11.39	11.96 a 11.49	11.50 a 11.09	11.36 a 11.01	11.38 a 11.08	11.51 a 11.25	11.63 a 11.49	11.79 a 11.45	
" 13	11.81 a 11.55	11.88 a 11.62	11.98 a 11.70	11.92 a 11.59	11.61 a 11.38	11.50 a 11.23	11.50 a 11.29	11.61 a 11.43	11.73 a 11.63	11.91 a 11.88	
" 20	11.79 a 11.51	11.87 a 11.61	11.97 a 11.70	11.90 a 11.66	11.60 a 11.31	11.48 a 11.20	11.31 a 11.20	11.49 a 11.38	11.56 a 11.46	11.75 a 11.72	
" 27	12.06 a 11.56	12.21 a 11.61	12.29 a 11.76	12.09 a 11.71	11.66 a 11.37	11.72 a 11.21	11.41 a 11.25	11.54 a 11.38	11.66 a 11.60	11.82 a 11.66	
Aug. 3	12.37 a 12.15	12.41 a 12.16	12.48 a 11.92	11.75 a 11.51	11.51 a 11.32	11.52 a 11.35	11.65 a 11.50	None	11.88 a 11.78	None	
" 10	12.21 a 12.03	12.30 a 12.03	12.03 a 11.82	11.61 a 11.41	11.42 a 11.25	11.42 a 11.25	11.52 a 11.40	11.66 a 11.58	11.80 a 11.70	None	
" 17	12.33 a 12.01	12.33 a 11.61	12.21 a 11.95	11.73 a 11.61	11.48 a 11.30	11.50 a 11.39	11.61 a 11.56	11.71 a 11.69	11.88 a 11.81	None	
" 24	12.33 a 12.01	12.33 a 11.98	12.18 a 11.88	11.73 a 11.48	11.50 a 11.26	11.51 a 11.27	11.63 a 11.39	11.75 a 11.69	11.77 a 11.66	12.07 a 11.82	
Aug. 31	12.25 a 12.15	12.24 a 11.69	12.01 a 11.56	11.62 a 11.27	11.37 a 11.14	11.39 a 11.16	11.51 a 11.28	11.53 a 11.28	11.70 a 11.59	None	
Sept. 7	11.76 a 11.27	11.60 a 11.12	11.31 a 10.90	11.41 a 10.79	11.48 a 10.83	11.24 a 10.98	11.25 a 11.22	11.45 a 11.31	None	None	
" 14	11.61 a 11.30	11.45 a 11.17	11.43 a 10.85	11.40 a 10.78	11.01 a 10.81	11.46 a 10.95	11.48 a 11.08	11.41 a 11.31	None	None	
" 21	11.60 a 10.93	11.40 a 10.79	11.02 a 10.63	10.86 a 10.53	10.86 a 10.55	11.01 a 10.68	11.14 a 10.81	11.29 a 10.96	None	None	

Prices of sales for January.—March 30, 11.65 a 11.51. Prices of sales for February.—April 20, 11.58; April 27, 11.66 a 11.21. Prices of sales for March.—May 25, 11.30 a 11.27; June 1, 11.46 a 11.41.

It will be noticed that with the last page of the foregoing future quotations the form of the quotation is changed. This is due to the fact that on the first of March, 1877, the decimal was adopted by the New York Cotton Exchange for expressing the fraction, and has been in use from that date.

QUOTATIONS FOR COTTON ON THE SPOT.

The business in futures in the New York market has since its introduction overshadowed the transactions in cotton on the spot, as we have previously shown. This was a very natural result of its greater proportions. The total receipts of cotton at New York have never reached but a very little in excess of a million bales, and yet the future sales last year aggregated over thirteen million bales. Still, the spot transfers are considerably in excess of the actual receipts, on account of the speculative transactions.

But no little inconvenience has always been experienced from the fact that quotations in the different markets of the United States were on a different basis. Frequent efforts have been made in the past to assimilate them, but always without success, until the organization of Cotton Exchanges throughout the North and South made it practicable. The first step was taken at the National Cotton Convention, held at Augusta on the 10th and 11th of June, 1874, when the following report, made by Mr. Chaffe, of New Orleans, was adopted:

First—That we recommend to the Convention the adoption of a uniform classification of cotton throughout the United States, to be called the Standard American Classification, and that the Convention request all Cotton Exchanges in the United States to appoint an expert, who shall meet at some point designated by this Convention in response to a call from the chairman appointed by this Convention, on or before the 1st of September next, when they together shall proceed to make a classification that shall be the American standard, which shall be adopted by all American Exchanges, and official quotations from and after the 1st of October next shall be based on the types prepared and established by said committee of experts.

Second—The types to represent the following grades, viz.: Good middling, middling, low middling, good ordinary, and ordinary.

In accordance with this report a committee was appointed by the Convention, Mr. J. T. Doswell, of New Orleans, being chairman, to carry out the recommendation contained in it. This committee met in New York on Tuesday, Sept. 1, 1874, and reached a satisfactory conclusion, fixing upon types and forwarding duplicates to the various Cotton Exchanges. With the 1st of October of the same year the new quotations, based on the American Standard of Classification, became the official ones. In New York the grades of fair and middling fair, as established by that Exchange, were added; and up to Sept. 1, 1875, the six grades of upland cotton, on the types that ruled in New York market previously, were also given, for the purpose of settling contracts in futures.

At the next National Cotton Convention, which was held at Greenbrier, White Sulphur Springs, Va., in July, 1875, Mr. Pinckney, of Charleston, offered the following resolution, which was adopted:

Resolved, That two grades be established, in addition to those adopted at the last Convention, to be known as middling fair and fair, and that the Committee on Classification of New York Exchange be requested to put up same and forward to other Exchanges.

But even with all these changes, a difference still remained between the American types and the Liverpool types. An attempt was consequently made to secure an international standard. In the fall of 1876 the Liverpool Cotton Brokers' Association presented to the National Cotton Exchange a case containing a complete set of their official Standard Samples for American Cottons. The Types were as follows:—Good Middling, Middling, Low Middling, Good Ordinary of each growth, Uplands, Mobile, New Orleans, Texas.

At the third Convention of the National Cotton Exchange, held in July, 1877, this subject was brought

up, and the following report, made by Mr. Lafitte, of New Orleans, was adopted:

No. 1.—They recommend the adoption of the Liverpool Standards, to conform to the types sent out by the Liverpool Cotton Exchange, and now in possession of this Exchange.

No. 2.—The types for upland cotton to be made up in New York by a board of eight experts, two of whom shall be appointed by the New York Exchange, two by the Charleston Exchange, two by the Savannah Exchange, one by the Norfolk Exchange, and one from the Cincinnati Exchange.

No. 3.—That the types for Mobile, Orleans and Texas cottons be made up by experts appointed respectively by the Mobile, New Orleans and Galveston Exchanges. That the types so made up shall be considered as the "American" as well as "International Standards," and that exact duplicates be forwarded to each Constituent Exchange, to the Liverpool Exchange, and to all members of any Exchange who may make application for the same upon payment of five dollars for each set. The original types to be retained by the Exchange charged with the duty of making up the types.

So far as the New York Cotton Exchange is concerned, no action has been taken on this subject, so that the quotations here are still based on the American Standard of Classification. There would seem to be, however, great advantages in having one standard everywhere; and we have no doubt that, in the end, the objections now felt to exist against the adoption of some such plan as here proposed will be overcome and the simpler system go into general use.

We now add the daily price of cotton in New York from September 1, 1870, to September 1, 1877. We first give the quotations in the New York market of Low Middling Uplands (old classification) to September 1, 1875. On and after the first of October, 1874, the official quotations were of the grades of cotton established by the National Cotton Exchange, as set out above, called the American Standard of Classification. From that date, therefore, to September 1, 1877, we give the daily prices of three grades of the new American classification, viz., (1) Good Ordinary, (2) Low Middling and (3) Middling. These prices will all be found on the following fourteen pages.

PRICE OF LOW MIDDLING UPLANDS EACH DAY OF 1870-71.—Old Classification.

Day of Month.	Sept.	October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.
1.....	18 7/8	16 3/4	16 3/4	15 3/4	S.	14 7/8	14 1/8	14	14	17	20	18 1/2
2.....	18 7/8	S.	16 1/2	15 1/2	Holiday.	14 3/4	14	S.	14	17 1/4	S.	18 1/2
3.....	19	15 7/8	16 1/2	15 1/4	14 7/8	14 3/4	13 3/4	14	14	S.	Holiday.	18 3/4
4.....	S.	15 7/8	16 1/2	S.	14 3/4	14 7/8	13 3/4	14	14 1/4	S.	Holiday.	18 3/4
5.....	19	16	16 1/2	15 1/4	14 3/4	S.	S.	14	14 3/4	18 1/4	20	18 3/4
6.....	19	16	S.	15 1/4	14 5/8	14 3/4	13 1/2	14	14 3/8	19	20	S.
7.....	19	16	16 1/2	15 3/4	14 5/8	14 3/4	13 1/2	Holiday.	S.	18 3/4	20 1/4	18 1/4
8.....	17 7/8	15 7/8	16	15 1/4	S.	14 1/2	13 1/2	14	14 3/8	18 1/4	20 3/8	17 7/8
9.....	17 7/8	S.	15 3/4	15 1/4	14 3/4	14 1/2	13 3/4	S.	14 3/8	18 1/2	S.	17 7/8
10.....	17 5/8	15 5/8	15 3/4	15	14 7/8	14 1/2	13 3/4	Holiday.	14 3/8	18 1/2	20 1/4	17 3/4
11.....	S.	15 3/4	15 3/4	S.	14 3/4	14 5/8	13 3/4	13 5/8	14 3/8	S.	20	17 1/2
12.....	17 5/8	15 3/4	15 3/4	15	14 3/4	S.	S.	13 5/8	14 3/8	19 1/4	19 7/8	S.
13.....	17 5/8	15 1/4	S.	14 3/4	14 3/4	14 1/2	13 3/4	13 5/8	15 3/8	19 1/4	19 7/8	S.
14.....	18 1/4	15 1/4	15 7/8	14 3/4	14 7/8	14 1/2	13 3/4	13 5/8	15 3/8	19 1/4	20	17 1/4
15.....	18 1/4	15 1/4	16 1/4	14 3/4	S.	14 3/8	13 3/4	13 5/8	15 3/8	19 1/4	20	17 1/4
16.....	18 1/4	S.	16 1/4	14 3/4	15	14 3/8	13 3/4	S.	15 3/4	19 1/2	20	17 1/4
17.....	18 1/2	15 3/4	15 3/4	14 3/4	14 7/8	14 1/4	14 1/8	S.	15 1/4	19 3/4	S.	17 1/4
18.....	S.	15 3/4	15 3/4	14 3/4	14 7/8	14 1/4	14 1/8	13 7/8	14 7/8	20	19 3/4	17 3/8
19.....	18 1/4	15 3/4	15 7/8	14 3/4	14 7/8	S.	13 7/8	13 7/8	14 7/8	S.	19 3/4	17 3/8
20.....	17 3/4	15 3/4	15 7/8	14 3/4	14 7/8	14 3/8	13 3/4	13 7/8	15 1/8	20 1/8	19 3/4	17 3/8
21.....	17 3/4	15 3/4	S.	15 7/8	14 7/8	14 3/8	13 3/4	13 7/8	15 1/8	20	19 3/4	17 3/8
22.....	17 3/4	15 3/4	15 7/8	15	S.	14 1/2	14	14	S.	19 1/4	19 3/4	17 3/8
23.....	17 3/4	S.	16 1/4	15 1/4	15	14 1/2	14 1/8	S.	15 1/4	19 3/4	S.	18
24.....	17 3/8	Holiday.	Holiday.	15 1/4	15	14 1/2	14	14	15 1/4	19 3/4	19 3/4	18 1/8
25.....	S.	16	16	S.	15	14 1/2	14 1/4	14 1/2	16 1/8	19 3/4	19 3/4	18
26.....	17 1/8	16 1/2	15 7/8	Holiday.	15 1/4	S.	S.	14 3/8	16	19 1/4	19 1/2	18
27.....	17	16	S.	15 3/4	15 1/4	14 3/8	14 1/4	14 1/4	16 1/8	19 1/4	19 1/2	S.
28.....	16 3/4	16	16	14 7/8	15	14 3/8	14 1/4	14 1/4	S.	19 1/4	19	18 1/4
29.....	16 3/4	16 5/8	15 3/4	14 3/4	15	14 3/8	14 1/4	14	16 1/2	19 1/2	18 3/4	18 3/8
30.....	16 3/8	S.	15 3/4	14 3/4	15	.....	14	S.	16 3/4	19 5/8	S.	18 3/8
31.....	.....	16 5/8	.....	14 3/4	15	.....	14	.....	17	.....	18 1/2	18 3/8
Lowest.....	16 1/8	15	15 3/4	14 3/4	14 3/4	14 1/4	13 1/2	13 5/8	14	17	18 1/2	17 1/4
Highest.....	19	17	16 3/4	15 3/4	15 1/4	14 7/8	14 1/4	14 1/2	17	20 1/8	20 3/8	18 1/2

PRICE OF LOW MIDDLING UPLANDS EACH DAY OF 1871-72.—*Old Classification.*

Day of Month.	Sept.	October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.
1.....	1834	1834	1838	1838	Holiday.	22	21 54	22 34	23	25 38	24 34	20 14
2.....	1834	1834	1844	1838	19 12	22	21 58	23	23	S.	24 12	20 38
3.....	1834	1834	1844	S.	20	22 18	S.	23	23	26 14	24 12	20 12
4.....	1834	1834	1844	1834	20 14	S.	22 14	22 78	23	26 14	Holiday.	S.
5.....	1834	1834	1844	1834	20 12	22 38	21 18	22 78	S.	26 14	Holiday.	20 12
6.....	1834	1834	1844	1838	S.	22 38	22	22 78	23	26 14	S.	20 54
7.....	1834	1834	1844	1838	21	22 38	22	S.	23 78	25 34	21	20 54
8.....	1834	1834	1844	1838	21	22 38	22	22 78	23 78	25 34	23 12	20 34
9.....	1834	1834	1844	1838	20 34	22 38	S.	22 78	23	S.	23 12	20 34
10.....	1834	1834	1844	S.	20 34	22 38	21 78	22 78	23	25 34	23 14	S.
11.....	1834	1834	1844	1838	20 34	S.	21 78	22 78	S.	25 34	23 14	20 34
12.....	1834	1834	1844	1834	21 12	22 12	21 78	22 78	23 12	25 34	23 14	20 34
13.....	1834	1834	1844	1834	S.	22 14	21 34	22 78	23 12	25 34	S.	20 34
14.....	1834	1834	1844	1834	21 12	22 14	21 34	22 78	23 12	25 34	22 34	20 34
15.....	1834	1834	1844	1838	21 12	22 14	22	22 78	23 12	S.	22 34	20 34
16.....	1834	1834	1844	S.	21 12	22 14	S.	22 78	23 12	25 34	22 34	20 34
17.....	1834	1834	1844	1834	21 14	22 14	22 12	22 78	S.	25 34	22 34	20 34
18.....	1834	1834	1844	1838	21 14	22 14	21 78	22 78	23 12	25 34	22 34	20 34
19.....	1834	1834	1844	1838	21 12	22 14	21 78	22 78	S.	25 34	22 34	20 34
20.....	1834	1834	1844	1838	21 12	22 14	21 78	22 78	23 12	25 34	22 34	20 34
21.....	1834	1834	1844	1838	S.	22 14	21 78	22 78	23 12	25 34	22 34	20 34
22.....	1834	1834	1844	1838	21 12	22 14	21 78	22 78	S.	25 34	22 34	20 34
23.....	1834	1834	1844	1838	21 12	22 14	21 78	22 78	23 12	25 34	22 34	20 34
24.....	1834	1834	1844	S.	21 12	22 14	21 78	22 78	S.	25 34	22 34	20 34
25.....	1834	1834	1844	Holiday.	21 12	22 14	21 78	22 78	23 12	25 34	22 34	20 34
26.....	1834	1834	1844	1838	21 12	22 14	21 78	22 78	23 12	25 34	22 34	20 34
27.....	1834	1834	1844	S.	21 12	22 14	21 78	22 78	S.	25 34	22 34	20 34
28.....	1834	1834	1844	1838	21 12	22 14	21 78	22 78	23 12	25 34	22 34	20 34
29.....	1834	1834	1844	1838	S.	22 14	21 78	22 78	23 12	25 34	22 34	20 34
30.....	1834	1834	1844	1838	21 12	22 14	21 78	22 78	23 12	25 34	22 34	20 34
31.....	1834	1834	1844	S.	22	22 14	21 78	22 78	23 12	25 34	22 34	20 34
Lowest.....	1834	18	1818	1838	19 12	21 34	21 58	22 34	22 78	25 34	20 14	20 14
Highest.....	2018	1978	1834	1938	22	22 78	22 58	23 18	25 38	26 38	24 14	21

PRICE OF LOW MIDDLING UPLANDS EACH DAY OF 1872-73.—Old Classification.

Day of Month.	Sept.	October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.
1.	21 1/2	18 3/4	19 1/4	18 3/4	Holiday.	20 1/4	19 5/8	19	18 3/8	18 1/4	20	19 5/8
2.	21 1/4	18 1/2	19 1/4	18 3/4	19 3/4	19 1/4	19 5/8	18 3/4	18 3/8	18 1/4	20	19 5/8
3.	21 1/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	Holiday.	19 5/8
4.	21 1/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	Holiday.	19 5/8
5.	21 1/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
6.	21 1/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
7.	21 1/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
8.	21 1/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
9.	21 1/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
10.	20 3/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
11.	20 3/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
12.	20 3/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
13.	20 3/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
14.	20 3/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
15.	20 3/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
16.	20 3/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
17.	20 3/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
18.	20 3/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
19.	20 3/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
20.	20 3/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
21.	20 3/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
22.	20 3/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
23.	20 3/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
24.	20 3/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
25.	20 3/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
26.	20 3/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
27.	20 3/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
28.	20 3/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
29.	20 3/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
30.	20 3/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
31.	20 3/4	18 1/2	19 1/4	18 3/4	19 3/4	20 1/4	19 5/8	18 3/4	18 3/8	18 1/4	19 1/4	19 5/8
Lowest.	18 1/4	18 1/4	18 1/4	18 1/4	18 1/4	18 1/4	18 1/4	18 1/4	18 1/4	18 1/4	18 1/4	18 1/4
Highest.	21 1/4	19 1/2	19 1/4	19 1/2	20 1/4	20 1/4	19 5/8	19	18 3/8	20	20	19 5/8

PRICE OF LOW MIDDLING UPLANDS EACH DAY OF 1873-74.—*Old Classification.*

Day of Month.	Sept.	October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.
1.....	19 1/8	17 7/8	14 3/8	15 3/8	Holiday.	S.	S.	16	16 7/8	17 5/8	16 3/4	16 1/8
2.....	19 1/4	17 7/8	S.	15 3/8	15 3/8	15	15	16	16 7/8	17 5/8	Holiday.	S.
3.....	19 1/4	17 7/8	11 1/2	15 3/8	S.	15	15	Holiday.	S.	17 1/2	Holiday.	16 1/8
4.....	19 1/8	17 7/8	Holiday.	15 3/8	15 3/8	15	15 1/4	S.	16 7/8	17 1/2	S.	16 1/4
5.....	19 1/2	17 7/8	13 3/4	15 3/8	15 3/8	15 1/8	15 1/4	16	16 7/8	17 1/2	16 3/4	16 1/4
6.....	19 1/2	17 7/8	13 3/4	S.	15 3/8	15 1/8	15 1/4	16	17	17 3/8	16 3/4	16 1/4
7.....	S.	17 7/8	13 3/4	15 3/8	15 3/4	S.	S.	16	17	17 3/8	16 3/4	S.
8.....	19 5/8	17 7/8	S.	15 3/8	15 3/4	15 1/8	15 1/4	16	17 1/4	17 3/8	16 1/2	16 1/4
9.....	19 3/4	17 7/8	13 3/8	15 3/8	15 3/4	15 1/8	15 1/4	16	17 1/4	17 3/8	16 1/2	16 1/4
10.....	19 3/4	17 7/8	13 3/8	15 3/8	S.	15 1/8	15 1/4	16	17 1/2	17 3/8	16 1/2	16 1/4
11.....	19 3/4	17 7/8	13 3/8	15 3/8	15 3/8	15 1/8	15 1/4	16	17 1/2	17 3/8	16 1/2	16 1/4
12.....	19 3/4	17 7/8	13 3/8	15 3/8	15 3/8	15 1/8	15 1/4	16	17 1/2	17 3/8	16 1/2	16 1/4
13.....	19 1/2	17 1/4	14 1/8	15 1/2	15 3/8	15 1/8	15 1/4	16	17 1/2	17 3/8	16 1/2	16 1/4
14.....	S.	17 1/4	14 1/8	S.	15 3/8	15 1/8	15 1/4	16	17 1/2	17 3/8	16 1/2	16 1/4
15.....	19 1/4	16 5/8	14 3/4	15 3/8	15 3/8	S.	S.	16 1/8	18	17 3/8	16 3/4	16 1/8
16.....	19 1/4	16 5/8	S.	15 3/8	15 3/4	15 1/4	15 1/4	16 1/4	18	17 3/8	16 3/4	S.
17.....	19 1/4	16 5/8	14 5/8	15 3/8	15 3/8	15 1/4	15 1/4	16 1/2	S.	17	16 3/4	16
18.....	19 1/4	16 5/8	14 5/8	15 3/8	S.	15 1/4	15 1/4	16 1/2	S.	17	16 3/4	16
19.....	18 1/4	S.	14 5/8	15 3/8	15 1/2	15 1/8	15 1/4	S.	18	16 3/4	S.	16
20.....	18 1/4	16 1/4	14 7/8	15 3/8	15 1/2	15 1/8	15 1/4	16 3/8	17 1/4	16 3/4	16 3/4	16
21.....	S.	16 1/4	15 1/8	S.	15 1/2	15 1/8	15 1/4	16 3/8	17 1/4	16 3/4	16 3/4	16
22.....	18 3/8	15 7/8	15 1/8	15 1/4	15 1/2	S.	S.	16 3/8	17 1/4	16 3/4	16 3/4	16
23.....	18	15 5/8	S.	15 1/4	15 1/2	15 1/8	15 1/4	16 3/8	17 1/4	16 3/4	16 3/4	15 7/8
24.....	17 1/2	15 1/4	15 1/8	15 1/4	15 1/2	15 1/8	15 1/4	16 3/8	17 1/4	16 3/4	16 3/4	15 7/8
25.....	17 3/8	15	15 3/8	15 1/4	15 1/2	15 1/8	15 1/4	16 3/8	17 1/4	16 3/4	16 3/4	15 7/8
26.....	17 3/8	S.	15 3/8	Holiday.	S.	15 1/8	15 1/4	16 3/8	17 1/4	16 3/4	16 3/4	15 7/8
27.....	17 3/8	17 3/8	15 3/8	Holiday.	15 3/8	15 1/8	15 1/4	16 3/8	17 1/4	16 3/4	16 3/4	15 7/8
28.....	S.	17 3/8	Holiday.	S.	15 3/8	15 1/8	15 1/4	16 3/8	17 1/4	16 3/4	16 3/4	15 7/8
29.....	17 3/4	17 3/8	15 3/4	15 3/8	15 1/8	15 1/8	S.	16 3/8	17 1/4	16 3/4	16 3/4	15 7/8
30.....	17 3/4	17 3/8	S.	15 3/8	15 1/8	15 1/8	15 1/4	16 3/8	17 1/4	16 3/4	16 3/4	15 7/8
31.....	.....	14 1/2	.....	15 3/8	15	.....	16	.....	S.	.....	16 3/4	16
Lowest.....	17 3/4	14 3/8	13 1/8	15 1/4	15	15	15	16	16 7/8	16 3/4	16 3/4	15 7/8
Highest.....	19 5/8	17 7/8	15 3/4	15 3/4	16	15 1/4	16	16 7/8	18	17 5/8	16 3/4	16 1/4

PRICE OF LOW MUDDLING UPLANDS EACH DAY OF 1871-75.—Old Classification.

Day of Month.	Sept.	October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.
1	16	15 1/2	S.	11 1/2	Holiday.	15 1/2	16 1/2	16 1/2	16 1/2	16	15 1/2	S.
2	15 3/4	15 1/2	11 1/2	11 1/2	14 1/2	15 1/2	16 1/2	16 1/2	S.	16	15 1/2	11 1/2
3	Holiday.	15 1/2	Holiday.	11 1/2	S.	15 1/2	16 1/2	16 1/2	16 1/2	16	Holiday.	11 1/2
4	16	S.	11 1/2	11 1/2	11 1/2	15 1/2	16 1/2	S.	16 1/2	15 1/2	S.	11 1/2
5	16	15	11 1/2	11 1/2	11 1/2	15 1/2	16 1/2	16 1/2	16	15 1/2	Holiday.	11 1/2
6	16	15 1/2	11 1/2	S.	11 1/2	15 1/2	16 1/2	16 1/2	16	S.	15 1/2	11 1/2
7	16	15	11 1/2	11 1/2	15	S.	S.	16 1/2	16	15 1/2	15 1/2	11 1/2
8	16	15 1/2	S.	11 1/2	15 1/2	15 1/2	16 1/2	16 1/2	16	15 1/2	15 1/2	11 1/2
9	16	15 1/2	11 1/2	11 1/2	11 1/2	15 1/2	16 1/2	16 1/2	S.	15 1/2	15 1/2	11 1/2
10	16	15 1/2	11 1/2	11 1/2	S.	15 1/2	16 1/2	16 1/2	16	15 1/2	15 1/2	11 1/2
11	16	S.	11 1/2	11 1/2	11 1/2	15 1/2	16 1/2	S.	16	15 1/2	S.	11 1/2
12	16	15 1/2	11 1/2	11 1/2	11 1/2	15 1/2	16 1/2	16 1/2	16	15 1/2	15 1/2	11 1/2
13	S.	15 1/2	11 1/2	S.	11 1/2	15 1/2	16 1/2	16 1/2	16	S.	15 1/2	11 1/2
14	16	15 1/2	11 1/2	11	15	S.	16 1/2	16 1/2	16	15 1/2	15 1/2	11 1/2
15	16	15 1/2	S.	11	15	15 1/2	16 1/2	16 1/2	16	15 1/2	15 1/2	11 1/2
16	15 3/4	15	11 1/2	11	15	15 1/2	16 1/2	16 1/2	S.	15 1/2	15	11 1/2
17	15 3/4	15	11 1/2	11	15	15 1/2	16 1/2	16 1/2	16	15 1/2	15	11 1/2
18	15 3/4	S.	11 1/2	11	15 1/2	15 1/2	16 1/2	S.	16	15 1/2	15	11 1/2
19	15 3/4	15	11 1/2	11	15 1/2	15 1/2	16 1/2	16 1/2	16	15	15	11 1/2
20	S.	15	11 1/2	S.	15 1/2	S.	16 1/2	16 1/2	16	S.	15 1/2	11 1/2
21	15 3/4	15 1/2	11 1/2	11	15 1/2	Holiday.	S.	16 1/2	16	15	15 1/2	11 1/2
22	15 3/4	15 1/2	S.	11	15 1/2	15 1/2	16 1/2	16 1/2	16	15	15 1/2	11 1/2
23	15 3/4	15 1/2	11 1/2	11	15 1/2	15 1/2	16 1/2	16 1/2	16	15	15 1/2	11 1/2
24	15 3/4	15 1/2	11 1/2	11 1/2	15 1/2	15 1/2	16 1/2	16 1/2	S.	15	15 1/2	11 1/2
25	15 3/4	15 1/2	11 1/2	Holiday.	S.	15 1/2	16 1/2	16 1/2	16	15 1/2	15 1/2	11 1/2
26	15 3/4	15 1/2	11 1/2	Holiday.	15 1/2	16	16 1/2	S.	15 1/2	15 1/2	S.	11 1/2
27	S.	15 1/2	11 1/2	S.	15 1/2	16 1/2	Holiday.	16 1/2	15 1/2	15 1/2	15 1/2	11 1/2
28	15 3/4	15 1/2	11 1/2	11 1/2	15 1/2	16 1/2	16 1/2	16 1/2	15 1/2	15 1/2	15 1/2	11 1/2
29	15 3/4	15 1/2	S.	11 1/2	15 1/2	S.	16 1/2	16 1/2	15 1/2	15 1/2	15 1/2	11 1/2
30	15 3/4	15 1/2	11 1/2	11 1/2	15 1/2	16 1/2	16 1/2	16 1/2	15 1/2	15 1/2	15 1/2	11 1/2
31	15 3/4	15 1/2	11 1/2	11 1/2	15 1/2	16 1/2	16 1/2	16 1/2	S.	15 1/2	15 1/2	11 1/2
Lowest	15 3/4	15 1/2	11 1/2	11	11 1/2	15 1/2	16 1/2	16 1/2	15 1/2	15	14 1/2	11 1/2
Highest	16	15 3/4	11 1/2	11 1/2	15 1/2	16 1/2	16 1/2	16 1/2	16 1/2	16	15 1/2	11 1/2

American Standard of Classification—1874-75—(1.) GOOD ORDINARY UPLANDS—Price Each Day of Year.

Day of Month.	Sept.	October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.
1.....	144	144	S.	137 ⁵	Holiday.	144	154	154	154	15	144	S.
2.....	144	144	134	137 ⁵	Holiday.	144	154	154	S.	15	144	134
3.....	144	144	Holiday.	137 ⁵	S.	144	154	154	154	15	Holiday.	134
4.....	S.	134	134	137 ⁵	134	144	154	S.	154	15	S.	134
5.....	134	134	134	134	134	144	154	154	154	15	Holiday.	134
6.....	134	134	134	S.	134	144	154	154	15	S.	144	134
7.....	14	14	134	134	134	S.	S.	154	15	144	144	134
8.....	14	14	S.	134	134	144	154	154	15	144	144	S.
9.....	144	144	134	134	134	144	154	154	15	144	144	134
10.....	144	144	134	134	S.	144	154	154	15	144	144	134
11.....	S.	134	134	134	134	144	154	S.	15	144	S.	134
12.....	144	144	134	134	134	144	154	154	15	144	144	134
13.....	144	144	134	S.	134	S.	S.	154	15	144	144	134
14.....	144	144	134	134	134	144	154	154	15	144	144	S.
15.....	144	144	S.	134	134	144	154	154	15	144	14	134
16.....	144	144	14	127 ⁵	134	144	154	154	15	144	S.	134
17.....	144	144	14	127 ⁵	S.	144	154	S.	15	144	14	134
18.....	S.	S.	14	127 ⁵	14	144	154	154	15	14	14	134
19.....	144	144	14	S.	144	144	154	154	15	14	14	134
20.....	144	144	14	127 ⁵	144	144	154	154	15	14	14	134
21.....	144	144	S.	127 ⁵	144	S.	154	154	15	14	14	134
22.....	144	144	14	127 ⁵	144	Holiday.	154	154	15	14	14	134
23.....	144	144	14	13	144	144	154	154	15	14	14	134
24.....	134	134	14	13	S.	144	154	154	15	14	14	134
25.....	144	144	14	13	144	144	154	154	15	14	14	134
26.....	S.	134	14	Holiday.	144	144	154	S.	15	14	S.	134
27.....	134	134	14	S.	144	144	154	154	15	14	14	134
28.....	134	134	14	134	144	144	154	154	15	14	14	134
29.....	134	134	S.	134	144	144	154	154	15	14	14	134
30.....	134	134	134	134	144	144	154	154	15	14	14	134
31.....	134	134	134	13	S.	144	154	154	S.	14	14	134
Lowest.....	134	134	134	127 ⁵	134	144	154	154	147	14	134	134
Highest.....	144	144	14	137 ⁵	144	154	154	154	154	15	144	134

On and after Oct. 1, 1874, the Official Quotations were the quotations of the grades of cotton established by the National Cotton Exchange. Hence, from this point the prices given in these figures are for cotton of the grades (1) Good Ordinary, (2) Low Middling, and (3) Middling. —Viz.: (1) Good Ordinary, (2) Low Middling, and (3) Middling.

American Standard of Classification—1871-75—(2.) LOW MIDDLING UPLANDS—Price Each Day of Year.

Day of Month.	Sept.	October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.
1.....	15	15	14 3/4	14 3/4	Holiday.	14 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	8.
2.....	14 7/8	14 7/8	14 3/4	14 3/4	Holiday.	14 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
3.....	14 7/8	14 7/8	14 3/4	14 3/4	8.	15	16	8.	15 7/8	15 3/4	Holiday.	14 1/4
4.....	14 7/8	14 7/8	14 3/4	14 3/4	13 7/8	15	16	16 1/4	15 7/8	15 3/4	8.	14 1/4
5.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	Holiday.	14 1/4
6.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
7.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
8.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
9.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
10.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
11.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
12.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
13.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
14.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
15.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
16.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
17.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
18.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
19.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
20.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
21.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
22.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
23.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
24.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
25.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
26.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
27.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
28.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
29.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
30.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
31.....	14 7/8	14 7/8	14 3/4	14 3/4	14 1/4	13 7/8	15 7/8	16 1/4	15 7/8	15 3/4	15	14 1/4
Lowest.....	14 1/4	14 1/4	14 1/4	14 1/4	13 7/8	14 7/8	15 7/8	16 1/4	15 7/8	15 3/4	13 7/8	13 7/8
Highest.....	15	15	14 1/2	14 3/8	14 7/8	15 7/8	16 1/4	16 1/4	15 7/8	15 3/4	15 1/4	14 1/4

On and after Oct. 1, 1874, the Official Quotations were the quotations of the grades of cotton established by the National Cotton Exchange. Hence, from this point the prices given in these prices are of those grades, and we give three of them each year—viz: (1) Good Ordinary, (2) Low Middling, and (3) Middling.

American Standard of Classification—1874-75—(3.) MIDDLING UPLANDS—Price Each Day of Year.

Day of Month.	Sept.	October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.
1.....	15 1/2	15 1/2	N.	14 3/4	Holiday.	15 3/8	16 1/4	16 5/8	16 1/4	16 1/2	15 5/8	N.
2.....	15 3/8	15 3/8	14 5/8	14 3/4	N.	15 3/4	16 1/4	16 5/8	N.	16 1/2	15 5/8	11 5/8
3.....	15 3/8	15 3/8	Holiday.	14 3/4	14 3/8	15 3/4	16 1/4	N.	16 1/4	16	Holiday.	11 5/8
4.....	15 1/2	15 1/2	14 5/8	14 3/4	14 3/8	15 3/4	16 1/4	16 5/8	16 1/4	16	N.	11 1/2
5.....	15 1/2	15 1/2	14 5/8	14 3/4	14 3/8	15 3/4	16 1/4	16 5/8	16 1/4	16	15 3/4	11 1/2
6.....	15 1/2	15 1/2	14 5/8	N.	14 3/8	15 3/4	N.	16 5/8	16 1/4	16	15 3/4	11 1/2
7.....	15 1/2	15 1/2	14 5/8	14 3/4	14 3/8	15 3/4	16 1/4	16 5/8	16 1/4	16	15 3/4	N.
8.....	15 1/2	15 1/2	N.	14 3/4	14 3/8	15 3/4	16 1/4	16 5/8	16 1/4	15 7/8	15 3/4	11 1/4
9.....	15 1/4	15 1/4	14 5/8	14 3/4	14 3/8	15 3/4	16 1/4	16 5/8	N.	15 3/4	15 1/2	11 1/4
10.....	15 1/4	15 1/4	14 5/8	14 3/4	14 3/8	15 3/4	16 1/4	16 5/8	16 1/4	15 3/4	15 1/2	11 1/4
11.....	N.	N.	14 5/8	14 3/4	14 3/8	15 3/4	16 1/4	16 5/8	16 1/4	N.	15 1/2	11 1/4
12.....	15 3/4	15 3/4	14 5/8	14 3/4	14 3/8	15 3/4	16 1/4	16 5/8	16 1/4	15 3/4	15 1/2	11 1/4
13.....	15 3/8	15 3/8	14 5/8	14 3/4	14 3/8	15 3/4	16 1/4	16 5/8	16 1/4	15 3/4	15 1/2	N.
14.....	15 3/8	15 3/8	N.	14 3/4	14 3/8	15 3/4	16 1/4	16 5/8	16 1/4	15 3/4	15 1/2	11 1/4
15.....	15 3/8	15 3/8	14 5/8	14 3/4	14 3/8	15 3/4	16 1/4	16 5/8	N.	15 3/4	15 1/2	11 1/4
16.....	15 3/8	15 3/8	14 5/8	14 3/4	14 3/8	15 3/4	16 1/4	16 5/8	16 1/4	15 3/4	15 1/2	11 1/4
17.....	15 3/8	15 3/8	14 5/8	14 3/4	14 3/8	15 3/4	16 1/4	16 5/8	16 1/4	15 3/4	15 1/2	11 1/4
18.....	15 3/8	15 3/8	14 5/8	14 3/4	14 3/8	15 3/4	16 1/4	16 5/8	16 1/4	15 3/4	15 1/2	11 1/4
19.....	15 1/2	15 1/2	14 5/8	14 3/4	14 3/8	15 3/4	16 1/4	16 5/8	16 1/4	15 3/4	15 1/2	11 1/4
20.....	15 1/2	15 1/2	14 5/8	N.	14 3/8	15 3/4	16 1/4	N.	16 1/4	15 3/4	15 1/2	11 1/4
21.....	15 1/2	15 1/2	14 5/8	14 3/4	14 3/8	15 3/4	16 1/4	16 5/8	16 1/4	15 3/4	15 1/2	11 1/4
22.....	14 7/8	14 7/8	N.	14 3/4	14 3/8	15 3/4	16 1/4	16 5/8	16 1/4	15 3/4	15 1/2	11 1/4
23.....	14 7/8	14 7/8	14 7/8	14 3/4	14 3/8	15 3/4	16 1/4	16 5/8	16 1/4	15 3/4	15 1/2	11 1/4
24.....	14 7/8	14 7/8	14 7/8	14 3/4	14 3/8	15 3/4	16 1/4	16 5/8	16 1/4	15 3/4	15 1/2	11 1/4
25.....	N.	N.	14 7/8	Holiday.	14 3/8	15 3/4	16 1/4	N.	16 1/4	15 3/4	15 1/2	11 1/4
26.....	14 3/4	14 3/4	Holiday.	N.	14 3/8	15 3/4	16 1/4	16 5/8	16 1/4	15 3/4	15 1/2	11 1/4
27.....	14 3/4	14 3/4	14 3/4	14 3/8	14 3/8	15 3/4	16 1/4	16 5/8	16 1/4	15 3/4	15 1/2	11 1/4
28.....	14 3/4	14 3/4	14 3/4	14 3/8	14 3/8	15 3/4	16 1/4	16 5/8	16 1/4	15 3/4	15 1/2	11 1/4
29.....	14 3/4	14 3/4	N.	14 3/8	14 3/8	15 3/4	16 1/4	16 5/8	16 1/4	15 3/4	15 1/2	11 1/4
30.....	14 3/4	14 3/4	14 3/4	14 3/8	14 3/8	15 3/4	16 1/4	16 5/8	N.	15 3/4	15 1/2	11 1/4
31.....	14 3/4	14 3/4	14 3/4	14 3/8	14 3/8	15 3/4	16 1/4	16 5/8	Holiday.	15 3/4	15 1/2	11 1/4
Lowest.....	14 5/8	14 5/8	14 5/8	14 3/8	14 3/8	15 3/4	16 1/4	16 5/8	16 1/4	15 3/4	15 1/2	11 1/4
Highest.....	15 1/2	15 1/2	14 7/8	14 3/8	14 3/8	15 3/4	16 1/4	16 5/8	16 1/4	15 3/4	15 1/2	11 1/4

On and after Oct. 1, 1874, the Official Quotations were the quotations of the grades of cotton established by the National Cotton Exchange. Hence, from this point the prices given in these pages are of those grades, and we give three of them each day—viz: (1) Good Ordinary, (2) Low Middling, and (3) Middling.

American Standard of Classification—1875-76—(A.) GOOD ORDINARY UPLANDS. Price Each Day of Year.

Day of Month.	Sept.	October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.
1	13 3/4	11 3/4	12 7/8	12	Holiday.	11	10 9/16	11 5/16	10 9/16	9 13/16	Holiday.	9 11-16
2	13 3/4	11 3/4	Holiday.	12	11 5/8	11	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	9 13-16
3	13 3/4	11 3/4	12 5/8	12	11 5/8	11	10 9/16	11 5/16	10 9/16	9 13/16	Holiday.	9 15-16
4	13 3/4	11 3/4	12 5/8	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
5	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
6	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
7	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
8	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
9	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
10	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
11	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
12	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
13	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
14	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
15	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
16	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
17	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
18	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
19	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
20	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
21	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
22	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
23	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
24	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
25	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
26	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
27	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
28	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
29	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
30	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
31	13 3/4	11 3/4	12 5/16	12	11 9/16	11 1-16	10 9/16	11 5/16	10 9/16	9 13/16	11 5/8	10 1-16
Lowest	11 3/4	11 3/4	12 5/8	12 3/4	11 5/8	10 9/16	10 9/16	10 9/16	10 9/16	9 13/16	9 13/16	9 11-16
Highest	13 3/4	13 7/16	12 7/8	12 3/4	11 5/8	11 1-16	11 5/16	11 5/16	10 9/16	10 1-16	9 13/16	10 1/2

American Standard of Classification—1875-76—(2.) LOW MIDDLING UPLANDS—Price Each Day of Year.

Day of Month.	Sept.	October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.
1.....	14 1/2	12 3/4	13 9-16	12 5/8	Holiday.	12 3/4	11 13-16	12 9-16	11 3/4	10 15-16	Holiday.	10 13-16
2.....	14 1/2	12 3/4	Holiday.	12 5/8	S.	12 3/4	11 13-16	S.	11 3/4	11 1-16	S.	10 15-16
3.....	14 1/2	12 3/4	13 5-16	12 5/8	12 11-16	12 3/4	11 13-16	12 9-16	11 3/4	11 1-16	Holiday.	11 1-16
4.....	14 1/2	12 3/4	13 3-16	12 5/8	12 11-16	12 3/4	S.	12 9-16	11 11-16	S.	10 15-16	11 1-16
5.....	14 1/2	12 3/4	13	12 5/8	12 11-16	12 3/4	11 15-16	12 9-16	11 5/8	11 1-16	10 13-16	S.
6.....	14 1/2	12 3/4	S.	12 5/8	12 11-16	12 3/4	11 15-16	12 9-16	S.	11 1-16	10 13-16	11 5/8
7.....	14 1/2	13 1-16	13	12 5/8	12 11-16	12 3/4	11 15-16	12 9-16	11 5/8	11 1-16	10 13-16	11 5/8
8.....	14 1/2	13 3-16	13	12 5/8	12 11-16	12 3/4	11 15-16	12 9-16	11 5/8	11 1-16	10 13-16	11 5/8
9.....	14 1/2	13 1-16	13	12 5/8	12 11-16	12 3/4	11 15-16	12 9-16	11 5/8	11 1-16	10 13-16	11 5/8
10.....	14 1/2	13 13-16	13	12 5/8	12 11-16	12 3/4	12 1-16	12 9-16	11 5/8	11 1-16	10 13-16	11 5/8
11.....	14 1/2	13 7-16	13 1-16	12 5/8	12 11-16	12 3/4	S.	12 9-16	11 5-16	S.	10 13-16	11 5/8
12.....	14 1/2	13 7-16	13 1-16	12 5/8	12 11-16	12 3/4	12 1-16	12 9-16	11 5-16	11 1-16	10 13-16	11 5/8
13.....	14 1/2	13 9-16	13	12 5/8	12 11-16	12 3/4	12 1-16	12 9-16	11 5-16	11 1-16	10 13-16	11 5/8
14.....	14 1/2	13 11-16	13	12 5/8	12 11-16	12 3/4	12 1-16	12 9-16	11 5-16	11 1-16	10 13-16	11 5/8
15.....	14 1/2	13 15-16	13	12 5/8	12 11-16	12 3/4	12 1-16	12 9-16	11 5-16	11 1-16	10 13-16	11 5/8
16.....	14 1/2	13 15-16	13	12 5/8	12 11-16	12 3/4	12 1-16	12 9-16	11 5-16	11 1-16	10 13-16	11 5/8
17.....	14 1/2	S.	13	12 5/8	12 11-16	12 3/4	12 1-16	12 9-16	11 5-16	11 1-16	10 13-16	11 5/8
18.....	14 1/2	13 8	13	12 5/8	12 11-16	12 3/4	S.	12 9-16	11 5-16	11 1-16	10 13-16	11 5/8
19.....	14 1/2	13 15-16	13 1-16	12 5/8	12 11-16	12 3/4	12 3-16	12 9-16	11 5-16	11 1-16	10 13-16	11 5/8
20.....	14 1/2	13 13-16	13 1-16	12 5/8	12 11-16	12 3/4	12 5-16	12 9-16	11 5-16	11 1-16	10 13-16	11 5/8
21.....	14 1/2	13 13-16	13 1-16	12 5/8	12 11-16	12 3/4	12 5-16	12 9-16	11 5-16	11 1-16	10 13-16	11 5/8
22.....	14 1/2	13 13-16	13 1-16	12 5/8	12 11-16	12 3/4	12 5-16	12 9-16	11 5-16	11 1-16	10 13-16	11 5/8
23.....	14 1/2	13 7	13 1-16	12 5/8	12 11-16	12 3/4	12 5-16	12 9-16	11 5-16	11 1-16	10 13-16	11 5/8
24.....	14 1/2	13 15-16	12 15-16	Holiday.	12 11-16	12 3/4	12 5-16	12 9-16	11 5-16	11 1-16	10 13-16	11 5/8
25.....	14 1/2	14 1-16	12 15-16	S.	12 11-16	12 3/4	12 5-16	12 9-16	11 5-16	11 1-16	10 13-16	11 5/8
26.....	14 1/2	14 1-16	12 15-16	S.	12 11-16	12 3/4	12 5-16	12 9-16	11 5-16	11 1-16	10 13-16	11 5/8
27.....	14 1/2	14 1-16	12 15-16	Holiday.	12 11-16	12 3/4	12 5-16	12 9-16	11 5-16	11 1-16	10 13-16	11 5/8
28.....	14 1/2	14 1-16	S.	12 11-16	12 11-16	12 3/4	12 5-16	12 9-16	S.	11 1-16	10 13-16	11 5/8
29.....	14 1/2	14 1-16	12 13-16	12 11-16	12 11-16	12 3/4	12 5-16	12 9-16	10 7/8	11 1-16	10 13-16	10 15-16
30.....	14 1/2	14 1-16	12 13-16	12 11-16	12 11-16	12 3/4	12 5-16	12 9-16	11 1-16	11 1-16	10 13-16	10 15-16
31.....	14 1/2	S.	.....	12 11-16	12 11-16	12 3/4	12 5-16	12 9-16	11 1-16	11 1-16	10 13-16	10 15-16
Lowest.....	12 3/4	12 3/4	12 13-16	12 5/8	12 3/4	11 13-16	11 13-16	12	10 13-16	10 15-16	10 3/4	10 13-16
Highest.....	14 1/2	14 1-16	13 9-16	12 7/8	12 11-16	12 5-16	12 9-16	12 9-16	11 3/4	11 3-16	10 15-16	11 7-16

American Standard of Classification—1875-76—(3.) MIDDLE-UPPLANDS—Price Each Day of Year.

Day of Month.	Sept.	October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.
1	14 58	13 12	13 74	13 1-16	Holiday.	13	12 58	13 34	12 58	11 78	Holiday.	11 34
2	14 58	13 12	Holiday.	13 1-16	13 1-16	13	12 58	13 34	12 58	12 1-16	Holiday.	11 78
3	14 58	13 12	13 58	13 1-16	13 5-16	13 1-16	12 58	13 34	12 9-16	S.	Holiday.	12
4	14 58	13 12	13 58	S.	13 5-16	13 1-16	12 58	13 34	12 9-16	11 78	11 78	12 1-16
5	14 58	13 12	13 5-16	13 3-16	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
6	14 58	13 12	S.	13 3-16	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
7	14 58	13 12	13 5-16	13 3-16	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
8	14 58	13 12	13 5-16	13 3-16	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
9	11 9-16	13 12	13 5-16	13 3-16	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
10	11 7-16	S.	13 5-16	13 3-16	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
11	14 58	13 12	13 5-16	13 3-16	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
12	14 58	13 12	13 5-16	S.	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
13	14 58	13 12	13 5-16	13 5-16	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
14	14 58	13 12	S.	13 5-16	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
15	14 58	13 12	13 5-16	13 5-16	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
16	14 58	13 12	13 5-16	13 5-16	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
17	14 58	13 12	13 5-16	13 5-16	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
18	13 78	14 7-16	13 5-16	13 5-16	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
19	13 78	14 7-16	13 5-16	S.	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
20	13 78	14 7-16	13 5-16	13 5-16	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
21	13 78	14 7-16	13 5-16	13 5-16	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
22	13 78	14 7-16	13 5-16	13 5-16	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
23	13 78	14 7-16	13 5-16	13 5-16	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
24	13 78	14 7-16	13 5-16	13 5-16	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
25	13 78	14 7-16	13 5-16	13 5-16	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
26	13 78	14 7-16	13 5-16	13 5-16	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
27	13 78	14 7-16	13 5-16	13 5-16	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
28	13 78	14 7-16	13 5-16	13 5-16	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
29	13 78	14 7-16	13 5-16	13 5-16	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
30	13 78	14 7-16	13 5-16	13 5-16	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
31	13 78	14 7-16	13 5-16	13 5-16	13 5-16	13	12 58	13 34	12 9-16	11 78	11 78	12 1-16
Lowest	13 74	13 12	13 74	13 1-16	13	12 58	12 58	12 13-16	11 34	11 78	11 11-16	11 34
Highest	14 58	14 7-16	13 74	13 5-16	13 5-16	13 1-16	13 34	13 34	12 58	12 58	11 78	12 58

American Standard of Classification—1876-77—(1.) GOOD ORDINARY UPLANDS—Price Each Day of Year.

Day of Month.	Sept.	October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.
1.....	10 3-16	8.	10 3-16	11 1-4	Holiday.	12	11 9-16	8.	9 15-16	10 8	8.	11 3-16
2.....	10 3-16	10 1-16	10 4	11 1-16	11 8	11 15-16	11 9-16	10 11-16	10 1-16	10 7-16	11 2	11 8
3.....	8.	10 1-16	10 7-16	8.	11 8	12	11 9-16	10 13-16	10 3-16	8.	11 7-16	11 1-16
4.....	10 5-16	10	10 3-16	11 1-16	11 8	8.	11 9-16	10 11-16	10 3-16	10 11-16	Holiday.	10 8
5.....	10 3-16	9 15-16	8.	11 1-16	12	11 15-16	11 2	10 9-16	10 3-16	10 8	Holiday.	8.
6.....	10 8	9 15-16	10 9-16	11 1-16	12 4	11 15-16	11 9-16	10 9-16	8.	10 8	Holiday.	10 8
7.....	10 8	9 15-16	Holiday.	11 8	12 4	11 13-16	11 2	10 9-16	9 15-16	10 11-16	Holiday.	10 11-16
8.....	10 4	8.	10 15-16	11 8	12 4	11 13-16	11 7-16	10 7-16	9 15-16	10 11-16	8.	10 11-16
9.....	10 4	9 15-16	11 3-16	11 8	12 4	11 15-16	11 5-16	10 7-16	9 15-16	10 11-16	11 8	10 11-16
10.....	8.	9 15-16	11 8	11 8	12 4	11 15-16	11 4	10 7-16	10	8.	11 5-16	10 11-16
11.....	10 5-16	10	11 3-16	11 4	12	11 15-16	11 8	10 7-16	9 15-16	10 11-16	11 5-16	8.
12.....	10 5-16	9 15-16	8.	11 4	12	11 15-16	11 1-16	10 7-16	9 15-16	10 11-16	11 5-16	10 11-16
13.....	10 4	9 15-16	11 1-16	11 4	12 8	11 15-16	11 1-16	10 7-16	8.	10 11-16	11 8	10 9-16
14.....	10 4	9 8	10 15-16	11 4	12 8	11 15-16	10 15-16	10 7-16	9 8	10 13-16	11 7-16	10 8
15.....	10 4	8.	10 15-16	11 4	12 8	11 15-16	10 15-16	8.	9 8	10 13-16	8.	10 8
16.....	10 4	9 8	10 15-16	11 4	12 8	11 8	10 11-16	10 7-16	9 8	10 13-16	11 2	10 11-16
17.....	8.	9 8	10 15-16	8.	12 8	11 8	10 11-16	10 5-16	9 15-16	8.	11 2	10 11-16
18.....	10 4	9 8	10 15-16	11 8	12 8	8.	8.	10 5-16	10	10 8	11 2	10 11-16
19.....	10 3-16	9 8	8.	11 8	12 8	11 13-16	10 11-16	10 5-16	9 15-16	10 8	11 2	8.
20.....	10 4	9 8	11	11 8	12 8	11 8	10 9-16	10 8	8.	10 13-16	11 2	10 9-16
21.....	10 5-16	9 13-16	11	11 4	12 4	11 8	10 9-16	10 8	9 15-16	10 15-16	11 2	10 9-16
22.....	10 5-16	8.	11	11 4	12 4	Holiday.	10 9-16	8.	9 15-16	10 15-16	8.	10 7-16
23.....	10 5-16	9 13-16	11	Holiday.	12 5-16	11 9-16	10 9-16	10 4	9 15-16	10 15-16	11 2	10 3-16
24.....	8.	9 13-16	11	8.	12 8	11 9-16	10 9-16	10 3-16	10 1-16	8.	11 7-16	10 3-16
25.....	10 5-16	9 8	11	Holiday.	12 8	8.	8.	10 1-16	10 3-16	10 15-16	11 7-16	10 8
26.....	10 3-16	Closed.	8.	11 4	12 8	11 7-16	10 9-16	10	10 5-16	10 15-16	11 5-16	8.
27.....	10 3-16	9 15-16	11 4	11 8	12 8	11 7-16	10 8	10	8.	11 3-16	11 8	10 4
28.....	10 3-16	10	11 4	11 8	12 8	11 7-16	10 7-16	10 1-16	10 4	11 3-16	11 8	10 3-16
29.....	10 1-16	8.	11 3-16	11 2	12 3-16	8.	10 9-16	8.	10 4	11 8	11 8	10 8
30.....	10 1-16	10 1-16	Holiday.	Holiday.	12 3-16	.....	Holiday.	10	Holiday.	11 7-16	11 5-16	10 8
31.....	.....	10 1-16	8.	Holiday.	12 3-16	.....	Holiday.	.....	10 7-16	.....	11 3-16	10 3-16
Lowest.....	10 1-16	9 13-16	10 3-16	11 1-16	11 8	11 7-16	10 8	10	9 8	10 8	11 3-16	10 8
Highest.....	10 5-16	10 1-16	11 4	11 2	12 8	12	11 9-16	10 13-16	10 7-16	11 7-16	11 2	11 3-16

American Standard of Classification—1876-77—(2.) LOW MIDDLING UPLANDS—Price Each Day of Year.

Day of Month.	Sept.	October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.
1.....	11	S.	10 11-16	11 58	Holiday.	12 7-16	12	S.	10 8	10 13-16	S.	11 58
2.....	11	10 9-16	10 9	11 9-16	12 9	12 8	12	11 9	10 12	10 7	11 15-16	11 9-16
3.....	S.	10 9-16	11 15-16	S.	12 9	12 7-16	11 15-16	11 14	10 8	S.	11 78	11 2
4.....	11	10 9	11 9-16	11 9-16	12 14	S.	S.	11 14	10 8	10 14	Holiday.	11 5-16
5.....	10 78	10 7-16	S.	11 9-16	12 14	12 38	11 15-16	11 1	10 8	11 1-16	Holiday.	S.
6.....	10 13-16	10 7-16	11 1-16	11 9-16	12 14	12 38	11 15-16	11 1	10 8	11 1-16	Holiday.	11 3-16
7.....	10 13-16	10 7-16	Holiday.	11 8	S.	12 14	11 15-16	10 15-16	10 8	11 13	S.	11 9
8.....	10 7	S.	11 7-16	11 8	12 14	12 14	11 15-16	10 8	10 8	11 13	11 13-16	11 8
9.....	10 7	10 7-16	11 11-16	11 8	12 14	12 38	11 11-16	10 7	10 7-16	11 13	11 13-16	11 8
10.....	S.	10 7-16	11 11-16	S.	12 14	S.	S.	10 7	10 8	11 13	11 13-16	11 8
11.....	10 15-16	10 7-16	11 11-16	11 4	12 14	12 38	11 11-16	10 7	10 8	11 13	11 13-16	11 8
12.....	10 15-16	10 7-16	S.	11 4	12 14	12 38	11 11-16	10 7	10 8	11 13	11 13-16	11 8
13.....	10 78	10 7-16	11 9-16	11 4	12 58	12 38	11 11-16	10 7	10 8	11 13	11 13-16	11 8
14.....	10 78	10 8	11 7-16	11 4	S.	12 38	11 11-16	10 7	10 8	11 13	11 13-16	11 8
15.....	10 78	S.	11 7-16	11 4	12 58	12 38	11 11-16	10 7	10 8	11 13	11 13-16	11 8
16.....	10 7	10 8	11 7-16	11 4	12 58	12 5-16	11 11-16	10 7	10 8	11 13	11 13-16	11 8
17.....	S.	10 8	11 7-16	S.	12 58	12 5-16	11 11-16	10 7	10 8	11 13	11 13-16	11 8
18.....	10 78	10 8	11 7-16	11 4	12 58	12 4	11 11-16	10 7	10 8	11 13	11 13-16	11 8
19.....	10 13-16	10 8	S.	11 4	12 58	12 4	11 11-16	10 7	10 8	11 13	11 13-16	11 8
20.....	10 13-16	10 8	11 2	11 4	12 11-16	12 4-16	11 11-16	10 13-16	10 8	11 13	11 13-16	11 8
21.....	10 13-16	10 5-16	11 2	11 4	S.	12 5-16	11 11-16	10 13-16	10 8	11 13	11 13-16	11 8
22.....	10 13-16	S.	11 2	11 4	12 4	Holiday.	11	S.	10 8	11 13	11 13-16	10 78
23.....	10 13-16	10 5-16	11 2	Holiday.	12 13-16	12	11	10 11-16	10 8	11 13	11 13-16	10 78
24.....	S.	10 5-16	11 2	S.	12 13-16	12	11	10 11-16	10 8	11 13	11 13-16	10 78
25.....	10 13-16	10 8	11 2	11 4	12 13-16	S.	S.	10 11-16	10 8	11 13	11 13-16	10 78
26.....	10 11-16	Closed.	11 2	11 4	12 13-16	11 78	13	10 7-16	10 8	11 13	11 13-16	10 78
27.....	10 11-16	10 7-16	11 2	11 4	12 13-16	11 78	13	10 7-16	10 8	11 13	11 13-16	10 78
28.....	10 11-16	10 7-16	11 2	11 4	12 13-16	11 78	13	10 7-16	10 8	11 13	11 13-16	10 78
29.....	10 11-16	S.	11 11-16	12	S.	11 78	13	10 7-16	10 8	11 13	11 13-16	10 78
30.....	10 9-16	10 9-16	Holiday.	Holiday.	12 58	.....	Holiday.	10 7-16	10 8	11 13	11 13-16	10 9-16
31.....	10 9-16	10 9-16	S.	S.	12 58	.....	Holiday.	10 7-16	10 8	11 13	11 13-16	10 9-16
Lowest.....	10 9-16	10 8	10 11-16	11 9-16	12 13-16	11 78	10 13-16	10 7-16	10 8	10 13-16	11 58	10 9-16
Highest.....	11	10 9-16	11 3	12	12 13-16	12 7-16	12	11 4	10 8	11 78	11 15-16	11 8

American Standard of Classification—1876-77—(3.) MIDDLING UPLANDS—Price Each Day of Year.

Day of Month.	Sept.	October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.
1.....	11 7 ⁸	S.	11 1 ⁴	12 1 ⁴	Holiday.	12 15-16	12 1 ²	S.	10 7 ⁸	11 5-16	S.	12
2.....	11 7 ⁸	11	11 5-16	12 1-16	12 5 ⁸	12 15-16	12 7-16	11 5 ⁸	11	11 3 ⁸	12 5-16	11 15-16
3.....	11 7 ⁸	11	11 1 ²	S.	12 5 ⁸	12 15-16	12 7-16	11 3 ⁴	11 1 ²	S.	12 1 ⁴	11 7 ⁸
4.....	11 3 ⁸	10 15-16	11 5 ⁸	12 1-16	12 3 ⁸	S.	12 7-16	11 5 ⁸	11 1 ²	11 5 ⁸	Holiday.	11 1-16
5.....	11 5 ⁸	10 7 ⁸	11 8 ⁸	12 1-16	13	12 7 ⁸	12 7-16	11 9-16	11 1 ²	11 9-16	Holiday.	S.
6.....	11 9-16	10 7 ⁸	11 8 ⁸	12 1-16	13 4	12 7 ⁸	12 7-16	11 9-16	11 1 ²	11 9-16	Holiday.	11 9-16
7.....	11 9-16	10 7 ⁸	11 9-16	12 1-16	S.	12 7 ⁸	12 7-16	11 7-16	10 7 ⁸	11 5 ⁸	Holiday.	11 2 ⁸
8.....	11 9-16	S.	12	12 1 ²	13 4	12 7 ⁸	12 7 ⁸	11 7-16	10 7 ⁸	11 5 ⁸	S.	11 2 ⁸
9.....	11 9-16	10 7 ⁸	12 1 ⁴	12 1 ²	13 4	12 7 ⁸	12 7 ⁸	11 7-16	10 7 ⁸	11 5 ⁸	12 3-16	11 2 ⁸
10.....	S.	10 7 ⁸	12 3-16	S.	13 4	12 7 ⁸	12 3-16	11 3 ⁸	10 7 ⁸	S.	12 3-16	11 2 ⁸
11.....	11 9-16	11	12 1 ⁴	12 1 ⁴	13	12 7 ⁸	S.	11 3 ⁸	10 7 ⁸	11 5 ⁸	12 3-16	11 2 ⁸
12.....	11 9-16	10 15-16	S.	12 1 ⁴	13	12 7 ⁸	S.	11 3 ⁸	10 7 ⁸	11 5 ⁸	12 3-16	11 2 ⁸
13.....	11 1 ²	10 15-16	12 1 ⁴	12 1 ⁴	13 3 ⁸	12 7 ⁸	S.	11 3 ⁸	10 7 ⁸	11 5 ⁸	12 3-16	11 2 ⁸
14.....	11 1 ²	10 7 ⁸	12 1 ⁴	12 1 ⁴	S.	12 7 ⁸	11 7 ⁸	11 3 ⁸	10 13-16	11 3 ⁸	12 3-16	11 2 ⁸
15.....	11 3 ⁸	S.	12	12 1 ²	13 8 ⁸	12 7 ⁸	11 7 ⁸	S.	10 13-16	11 3 ⁸	S.	11 7-16
16.....	11 8 ⁸	10 7 ⁸	12	12 1 ²	13 8 ⁸	12 13-16	11 8 ⁸	11 3 ⁸	10 13-16	11 3 ⁸	12 5-16	11 2 ⁸
17.....	S.	10 7 ⁸	12	S.	13 8 ⁸	12 13-16	11 8 ⁸	11 4	10 7 ⁸	S.	12 5-16	11 2 ⁸
18.....	11 3 ⁸	10 7 ⁸	12	12 8 ⁸	13 8 ⁸	S.	S.	11 4	10 7 ⁸	11 11-16	12 5-16	S.
19.....	11 5-16	10 7 ⁸	S.	12 8 ⁸	13 3-16	12 13-16	11 3 ⁸	11 4	10 7 ⁸	11 11-16	12 5-16	11 2 ⁸
20.....	11 3-16	10 7 ⁸	12	12 8 ⁸	13 3-16	12 13-16	11 3 ⁸	11 4	10 7 ⁸	11 11-16	12 5-16	11 2 ⁸
21.....	11 4	10 7 ⁸	12	12 1 ²	S.	12 13-16	11 3 ⁸	11 4	10 7 ⁸	11 11-16	12 5-16	11 2 ⁸
22.....	11 4	S.	12	12 1 ²	13 1 ⁴	12 13-16	11 3 ⁸	11 4	10 7 ⁸	11 11-16	12 5-16	11 2 ⁸
23.....	11 4	10 7 ⁸	12	12 1 ⁴	13 1 ⁴	Holiday.	11 3 ⁸	S.	10 7 ⁸	11 11-16	S.	11 4
24.....	S.	10 7 ⁸	12	Holiday.	13 5-16	12 13-16	11 3 ⁸	11 3-16	10 7 ⁸	11 11-16	12 5-16	11
25.....	11 4	10 15-16	12	S.	13 5-16	12 13-16	11 3 ⁸	11 3-16	11	S.	12 5-16	10 15-16
26.....	11 4	Closed.	12	Holiday.	13 5-16	12 13-16	11 3 ⁸	11	11 1 ²	11 3 ⁸	12 4	S.
27.....	11 4	11	S.	12 4	13 5-16	12 13-16	11 3 ⁸	10 15-16	11 4	11 3 ⁸	12 4	11 1-16
28.....	11 3 ⁸	11 1-16	12 8 ⁸	12 8 ⁸	13 5-16	12 13-16	11 3 ⁸	11	S.	11 15-16	12 4	11 1-16
29.....	11 3 ⁸	S.	12 3-16	12 2 ⁸	S.	12 13-16	11 3 ⁸	11 3-16	11 3-16	12	12 3-16	11
30.....	11	11 4 ⁸	Holiday.	12 2 ⁸	13 8 ⁸	.....	Holiday.	S.	11 3-16	12 4	S.	10 15-16
31.....	.....	11 4 ⁸	.....	S.	13 8 ⁸	.....	Holiday.	.....	11 3 ⁸	.....	12	10 15-16
Lowest.....	11	10 7 ⁸	11 4	12 1-16	12 5 ⁸	12 8 ⁸	11 5-16	10 15-16	10 13-16	11 5-16	12	10 15-16
Highest.....	11 7 ⁸	11 3 ⁸	12 4	12 2 ⁸	13 5-16	12 15-16	12 2 ⁸	11 3 ⁸	11 8 ⁸	12 4	12 5-16	12

PRICES IN GREAT BRITAIN.

We can only add a brief summary of the prices of cotton at Liverpool. For very early dates the compilation which is generally relied upon is found in Tooke's "High and Low Prices." That statement is scarcely of sufficient interest to us to be inserted in full here and we therefore give the range as he has it for each year from 1788 to 1800.

LIVERPOOL PRICES OF COTTON, EXCLUSIVE OF DUTY.

Year.	West India, &c.				Bow'd Georgia.				Pernambuco.				Bengal&Surat.			
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
1788.	1	2	@	2	9	.....	.....	.....	1	6	@	2	7	.....	.....	.....
1789.	1	0	@	1	10	.....	.....	.....	1	4	@	1	8	.....	.....	.....
1790.	1	1	@	1	9	.....	.....	.....	1	7	@	1	10	.....	0 8	@ 0 10
1791.	1	1	@	2	6	.....	.....	.....	1	6	@	2	7	.....	0 8	@ 1 3
1792.	1	8	@	2	6	.....	.....	.....	1	10	@	2	6	.....	0 11	@ 1 3
1793.	1	0	@	2	3	.....	1 1	@ 1 4	1	9	@	2	3	.....	0 10	@ 1 4
1794.	1	1	@	2	2	.....	1 0	@ 1 6	1	6	@	2	1	.....	0 9	@ 0 11
1795.	1	3	@	2	6	.....	1 3	@ 2 3	1	9	@	2	6	.....	0 11	@ 1 10
1796.	1	7	@	2	6	.....	1 0	@ 2 5	1	10	@	2	6	.....	0 11	@ 1 10
1797.	1	5	@	3	4	.....	1 0	@ 3 1	1	11	@	3	5	.....	0 10	@ 1 11
1798.	2	1	@	3	4	.....	1 10	@ 3 9	3	1	@	3	5	.....	1 8	@ 2 2
1799.	1	6	@	4	7	.....	1 5	@ 5 0	2	5	@	4	8	.....	0 11	@ 2 4
1800.	1	8	@	3	2	.....	1 4	@ 3 0	2	9	@	3	1	.....	0 10	@ 1 6

The average prices for subsequent years have been as follows, according to the Liverpool Cotton Brokers' Circular.

Years	Midd'g Upl'ds.	Fair Surat.	Years	Midd'g Upl'ds.	Fair Surat.	Years	Midd'g Upl'ds.	Fair Surat.
1801..	d.	d	1827..	d.	d.	1853..	d.	d.
1802..	18	16	1828..	6½	5½	1854..	5¾	4¼
1803..	16	14	1829..	6¾	4½	1855..	5¾	3½
1804..	12½	11½	1830..	5¾	4	1856..	5¾	4
1805..	14	11½	1831..	6¾	5	1857..	6½ ¹⁶	4¾
1806..	16½	14	1832..	6	4½	1858..	7¾	5½
1807..	18½	11½	1833..	6¾	5	1859..	6¾	5
1808..	14½	13	1834..	8½	6½	1860..	6¼	5
1809..	22	19½	1835..	8¾	6¾	1861..	6¼	5
1810..	20	18½	1836..	10¼	7¼	1862..	8½ ¹⁶	6½ ¹⁶
1811..	15¼	15	1837..	6¼	6¼	1863..	17¼	12¾
1812..	12½	12	1838..	7	4¾	1864..	23¼	19¼
1813..	16¾	14	1839..	7	4¾	1865..	27½	21½
1814..	23	17½	1840..	7¾	5¾	1866..	19	14½
1815..	29½	21	1841..	6	4½	1867..	15½	12
1816..	20¾	17	1842..	1½	1½	1868..	10¾	8¾
1817..	18¼	15¾	1843..	6¼	4½	1869..	10½	8½
1818..	20¾	17	1844..	5¾	4	1870..	12¼	9¾
1819..	20¾	17	1845..	4¾	3½	1871..	9½ ¹⁶	8½
1820..	13½	9¾	1846..	4¾	3½	1872..	8½ ¹⁶	5½ ¹⁶
1821..	11½	8½	1847..	4¾	3½	1873..	10½ ¹⁶	7½
1822..	9½	7¾	1848..	6¼	4½	1874..	9	6½ ¹⁶
1823..	8¼	6¾	1849..	4½	3¼	1875..	8	5½ ¹⁶
1824..	8¼	6¾	1850..	5½	3¾	1876..	7¾	5
1825..	8½	6¾	1851..	7	5¼	1877..	6¼	1½
1826..	11¾	8¾	1852..	5½	4¼		6½ ¹⁶	5½ ¹⁶
	6¾	5½		5½ ¹⁶	4¼			

The full details for 1877 and the influences acting on the market we have made up as follows from Ellison & Co.

PRICES IN LIVERPOOL AND MANCHESTER EACH WEEK OF 1877.

Week ended.		Uplands.		Orleans.		Pernam.		Santos.		Egypt.		Dhol.		Oomra.		Bengal.		(Common 32s (top)		(Common 30s wait)		(Common 10s Mch)		54-pound Shirlings.		
		Mid.	Mid.	Mid.	Fair.	Fair.	Fair.	Fair.	Fair.	Fair.	Fair.	Fair.	Fair.	Fair.	Fair.	Fair.	Fair.	10 ¹ / ₄	11	11 ³ / ₄	7	0	d.	s.	d.	
1877. Jan. 4.		613 ¹ / ₆	7	613 ¹ / ₆	63 ³ / ₄	63 ³ / ₄	63 ³ / ₄	63 ³ / ₄	63 ³ / ₄	57 ¹ / ₆	57 ¹ / ₆	57 ¹ / ₆	57 ¹ / ₆	43 ³ / ₄	43 ³ / ₄	43 ³ / ₄	10 ¹ / ₄	11	11 ³ / ₄	7	0	@	8	9		
11.		7	7 ¹ / ₄	7 ¹ / ₄	7 ¹ / ₆	7 ¹ / ₆	7 ¹ / ₆	7 ¹ / ₆	7	53 ³ / ₄	53 ³ / ₄	53 ³ / ₄	53 ³ / ₄	5	5	5	10 ⁵ / ₈	11 ¹ / ₄	11 ³ / ₄	7	3	@	9	3		
18.		613 ¹ / ₆	7 ¹ / ₆	7 ¹ / ₆	7 ¹ / ₆	7 ¹ / ₆	7 ¹ / ₆	7 ¹ / ₆	67 ⁸ / ₈	53 ³ / ₄	53 ³ / ₄	53 ³ / ₄	47 ⁸ / ₈	47 ⁸ / ₈	47 ⁸ / ₈	10 ¹ / ₂	11 ¹ / ₄	11 ³ / ₄	7	3	@	9	3			
25.		615 ¹ / ₆	7 ¹ / ₈	7 ¹ / ₈	7 ¹ / ₆	7 ¹ / ₆	7 ¹ / ₆	7 ¹ / ₆	67 ⁸ / ₈	51 ¹ / ₆	53 ³ / ₄	53 ³ / ₄	5	5	5	10 ¹ / ₂	11 ¹ / ₄	11 ³ / ₄	7	3	@	9	3			
Feb. 1.		613 ¹ / ₆	7	7	7	7	615 ¹ / ₆	63 ³ / ₄	63 ³ / ₄	51 ¹ / ₆	53 ³ / ₄	53 ³ / ₄	5	5	5	10 ¹ / ₄	11	11 ¹ / ₂	7	3	@	9	13 ¹ / ₂			
8.		65 ⁸ / ₈	613 ¹ / ₆	67 ⁸ / ₈	613 ¹ / ₆	67 ⁸ / ₈	613 ¹ / ₆	67 ⁸ / ₈	59 ¹ / ₆	53 ³ / ₄	53 ³ / ₄	53 ³ / ₄	115 ¹ / ₆	115 ¹ / ₆	115 ¹ / ₆	10 ¹ / ₄	11	11 ³ / ₄	7	3	@	9	13 ¹ / ₂			
15.		63 ³ / ₄	67 ⁸ / ₈	67 ⁸ / ₈	613 ¹ / ₆	67 ⁸ / ₈	613 ¹ / ₆	67 ⁸ / ₈	51 ¹ / ₆	59 ¹ / ₆	51 ¹ / ₆	53 ³ / ₄	415 ¹ / ₆	415 ¹ / ₆	415 ¹ / ₆	10 ¹ / ₈	11	11 ¹ / ₄	7	3	@	9	13 ¹ / ₂			
22.		69 ¹ / ₆	63 ³ / ₄	63 ³ / ₄	63 ³ / ₄	63 ³ / ₄	63 ³ / ₄	63 ³ / ₄	53 ³ / ₄	53 ³ / ₄	53 ³ / ₄	53 ³ / ₄	57 ¹ / ₆	47 ⁸ / ₈	47 ⁸ / ₈	10	11	11	11	7	3	@	9	0		
Mar. 1.		63 ³ / ₄	613 ¹ / ₆	63 ³ / ₄	67 ⁸ / ₈	67 ⁸ / ₈	67 ⁸ / ₈	67 ⁸ / ₈	53 ³ / ₄	53 ³ / ₄	53 ³ / ₄	53 ³ / ₄	47 ⁸ / ₈	47 ⁸ / ₈	47 ⁸ / ₈	10	11	11 ³ / ₄	7	0	@	9	0			
8.		65 ⁸ / ₈	613 ¹ / ₆	63 ³ / ₄	67 ⁸ / ₈	67 ⁸ / ₈	67 ⁸ / ₈	67 ⁸ / ₈	61 ² / ₂	53 ³ / ₄	53 ³ / ₄	53 ³ / ₄	47 ⁸ / ₈	47 ⁸ / ₈	47 ⁸ / ₈	9 ³ / ₄	10 ³ / ₄	11	7	0	@	9	0			
15.		63 ³ / ₄	69 ¹ / ₆	65 ⁸ / ₈	63 ³ / ₄	63 ³ / ₄	63 ³ / ₄	63 ³ / ₄	61 ² / ₂	53 ³ / ₄	53 ³ / ₄	53 ³ / ₄	51 ¹ / ₆	43 ³ / ₄	43 ³ / ₄	9 ¹ / ₂	10 ¹ / ₂	10 ³ / ₄	7	0	@	8	10 ¹ / ₂			
22.		61 ² / ₂	67 ⁸ / ₈	61 ² / ₂	63 ³ / ₄	63 ³ / ₄	63 ³ / ₄	63 ³ / ₄	63 ³ / ₄	53 ³ / ₄	53 ³ / ₄	53 ³ / ₄	51 ¹ / ₆	43 ³ / ₄	43 ³ / ₄	11 ¹ / ₆	9 ¹ / ₄	10	10 ¹ / ₂	6	10 ¹ / ₂	@	8	9		

Strong; large business; spot 13d. to 3¹/₄d., and futures 5¹/₄d. to 3¹/₄d. higher; New York buoyant; Manchester active. Opened strong, extensive demand; small American receipts, advance of 3¹/₄d. to 5¹/₄d., but closed dull & lost 1¹/₄d. to 3¹/₄d. Very quiet; small demand; increased American receipts; heavy import; pressure to sell; decline of 3¹/₄d. to 4¹/₄d. Improved demand; advance of 1¹/₄d. to 3¹/₄d. on spot and futures; closed quiet and weak. Quiet all week; closed flat. Spot prices 13d. and futures 3¹/₄d. lower. Increased receipts; large import. Flat; very small demand; excessive supply; large American receipts; Manchester dull; spot and futures 3¹/₄d. easier. Opened better, became active, advanced 3¹/₄d., but subsequently reacted; closed quiet. Net advance 1¹/₄d. to 3¹/₄d. spot and futures. Very idle, with tendency downwards; small demand; excessive supply. Decline 3¹/₄d. to 3¹/₄d. on spot, and 5¹/₄d. to 3¹/₄d. in futures. Dull first day, at 1¹/₄d. decline, but better remainder week. Advance 1¹/₄d. from lowest point, 1¹/₄d. on week. Futures 3¹/₄d. to 1¹/₄d. higher. Opened with good inquiry; spots 1¹/₄d., futures 1¹/₄d. to 1¹/₄d. higher, but subsequently lost advance on spot, and 1¹/₄d. besides for futures. Gloomy all week, heavy import; retail demand; pressure to sell; American spots and futures 3¹/₄d. lower; other sorts 1¹/₄d. to 3¹/₄d. lower. Continued dullness; small demand; unfavorable Eastern exchanges. American 1¹/₄d. to 1¹/₄d. lower, all positions; other growths 3¹/₄d. lower.

COURSE OF THE MARKET.

Strong; large business; spot 1¹/₂d. to 3¹/₄d., and futures 5¹/₄d. to 5¹/₂d. higher; New York buoyant; Manchester active. Opened strong; extensive demand; small American receipts; advance of 3¹/₄d. to 5¹/₂d., but closed dull & lost 1¹/₂d. to 1¹/₄d. Very quiet; small demand; increased American receipts; heavy import; pressure to sell; decline of 3¹/₄d. to 1¹/₂d. Improved demand; advances of 1¹/₂d. to 1¹/₄d. on spot and futures; closed quiet and weak. Quiet all week; closed dull. Spot prices 1¹/₂d. and futures 5¹/₄d. lower. Increased receipts; large import. Flat; very small demand; excessive supply; large American receipts; Manchester dull; spot and futures 3¹/₄d. easier. Opened better, became active, advanced 3¹/₄d., but subsequently reacted; closed quiet. Net advance 1¹/₂d. to 1¹/₄d. spot and futures. Very idle, with tendency downwards; small demand; excessive supply. Decline 1¹/₂d. to 3¹/₄d. on spot, and 5¹/₄d. to 3¹/₄d. in futures. Dull first day at 1¹/₂d. decline, but better remainder week. Advance 1¹/₂d. from lowest point, 1¹/₂d. on week. Futures 1¹/₂d. to 1¹/₄d. higher. Opened with good inquiry; spots 1¹/₂d., futures 1¹/₂d. to 1¹/₄d. higher, but subsequently lost advance on spot, and 1¹/₂d. besides for futures. Gloomy all week; heavy import; retail demand; pressure to sell; American spots and futures 1¹/₂d. lower; other sorts 1¹/₂d. to 1¹/₄d. lower. Continued dullness; small demand; unfavorable Eastern exchanges. American 1¹/₂d. to 1¹/₄d. lower, all positions; other growths 1¹/₂d. lower.

PRICES IN LIVERPOOL AND MANCHESTER EACH WEEK OF 1877.—CONTINUED.

Week ended.	COURSE OF THE MARKET										84-pound Shuttlings
	Uplands	Orleans.	Pernam.	Santos.	Egypt	Dholl.	Comra.	Bengal.	Common (30s warr)	Common (40s Mule)	
1877. Mar. 29	Mid. 6 ¹ / ₂ 6 ¹ / ₂	Mid. 6 ¹ / ₂ 6 ¹ / ₂	Fair. 6 ¹ / ₂ 6 ¹ / ₂	Fair. 6 ¹ / ₂ 6 ¹ / ₂	Fair. 6 ¹ / ₂ 6 ¹ / ₂	Fair. 5 ¹ / ₂ 5 ¹ / ₂	Fair. 5 ¹ / ₂ 5 ¹ / ₂	Fair. 5 ¹ / ₂ 5 ¹ / ₂	9 10	10 ¹ / ₂ 6 6	d. s. d. 6 6 6
April 5	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	5 ¹ / ₂	5 ¹ / ₂	4 ¹ / ₂	9 10	10 ¹ / ₂ 6 6	6 6 6
12.	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	5	5	4 ¹ / ₂	8 ¹ / ₂	10 ¹ / ₂ 6 9	6 9 6
19.	6	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	4 ¹ / ₂	4 ¹ / ₂	4 ¹ / ₂	9 10	10 ¹ / ₂ 6 9	6 9 6
26.	5 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	4 ¹ / ₂	4 ¹ / ₂	4 ¹ / ₂	8 ¹ / ₂	10 ¹ / ₂ 6 9	6 9 6
May 3	5 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	4 ¹ / ₂	4 ¹ / ₂	4 ¹ / ₂	8 ¹ / ₂	10 ¹ / ₂ 6 6	6 6 6
10	5 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	4 ¹ / ₂	4 ¹ / ₂	4 ¹ / ₂	8 ¹ / ₂	10 ¹ / ₂ 6 6	6 6 6
17.	5 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	4 ¹ / ₂	4 ¹ / ₂	4 ¹ / ₂	8 ¹ / ₂	10 ¹ / ₂ 6 6	6 6 6
24	5 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	4 ¹ / ₂	4 ¹ / ₂	4 ¹ / ₂	8 ¹ / ₂	10 ¹ / ₂ 6 6	6 6 6
31.	5 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	4 ¹ / ₂	4 ¹ / ₂	4 ¹ / ₂	8 ¹ / ₂	10 ¹ / ₂ 6 6	6 6 6
June 7.	6	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	5	5	4 ¹ / ₂	8 ¹ / ₂	10 ¹ / ₂ 6 6	6 6 6
14	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	5 ¹ / ₂	5 ¹ / ₂	4 ¹ / ₂	9 ¹ / ₂	10 ¹ / ₂ 6 6	6 6 7 ¹ / ₂
21.	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	5 ¹ / ₂	5 ¹ / ₂	4 ¹ / ₂	9	10 ¹ / ₂ 6 6	6 6 7 ¹ / ₂

Opened steady; relapsed on Low's failure; closed better; net decline ¹/₂, but futures ¹/₂ higher than prev's lowest.
 Opened strong on 24th after holidays; sig. of Protocol; advance ¹/₂ to ³/₄gd. spot, and ³/₄gd. to ¹/₂gd. in futures, but reacted and lost ¹/₂gd. and ³/₄gd.
 Dull, owing to rejection of Protocol by Turkey; pressure to sell; prices ¹/₂ to ³/₄gd. on spot & ³/₄gd. to ¹/₂gd. in futures; low r. Contin'd heaviness; decline of ³/₄gd. on spot, & ³/₄gd. to ¹/₂gd. on futures, but closed better at recovery of ¹/₂gd. all round.
 Opened with more confidence; gained ¹/₂gd., but became flat on declaration of war, and lost ¹/₂gd.; net fall ¹/₂gd. on week.
 Opened flat; semi-depressed; prices lost ¹/₂gd., but recovered ¹/₂gd. in second half, owing to better demand, slow, but not depressed; American and Brazil partially ¹/₂gd. lower; futures ¹/₂gd. easier.
 Opened flat, and lost ¹/₂gd., but regained ¹/₂gd., and closed more cheerful. Net fall in futures ¹/₂gd. to ¹/₂gd. Whitsuntide holidays, Saturday to Tuesday; re-opened with good demand. Surats ¹/₂gd. higher; others unchanged. Futures ¹/₂gd. lower.
 Steady, with hardening tendency. American ¹/₂gd., Surats ¹/₂gd., futures ¹/₂gd. higher. Failing off in Bombay receipts.
 Opened quieter, became stronger, closed firm at advance of ¹/₂gd. to ³/₄gd. in American, and ³/₄gd. to ¹/₂gd. Surats; futures ³/₄gd. higher.
 Opened steady, became strong, then paused, closed firm at advance of ³/₄gd. to ¹/₂gd. for American and ¹/₂gd. others; futures ³/₄gd. higher.
 Opened steady, but gradually toned down; closed dull, with small demand, at decline ¹/₂gd. on spot & ³/₄gd. to ¹/₂gd. for futures.

PRICES IN LIVERPOOL AND MANCHESTER EACH WEEK OF 1877.—CONTINUED.

Week ended.	Uplands.		Orleans.		Peruam.		Santos.		Egypt.		Dhol.		Oomra.		Bengal.	Common 328 Cop.	Common 308 walt.	Common 108 Minc.	84-pound Shurtings.		
	Mid.	6 ¹ / ₂	Mid.	6 ¹ / ₂	Fair.	6 ¹ / ₂	Fair.	6 ¹ / ₂	Fair.	6 ¹ / ₂	Fair.	6 ¹ / ₂	Fair.	6 ¹ / ₂	Fair.	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	s.	d.	d.
1877. June 28.	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	9 ¹ / ₂	9 ¹ / ₂	10 ¹ / ₂	8.	8.	6
July 5.	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	8 ¹ / ₂	9 ¹ / ₂	10 ¹ / ₂	6	4 ¹ / ₂	8
July 12.	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	9	10	10 ¹ / ₂	6	4 ¹ / ₂	8
July 19.	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	9	10	10 ¹ / ₂	6	4 ¹ / ₂	8
July 26.	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	9	10	10 ¹ / ₂	6	4 ¹ / ₂	8
Aug. 2.	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	8 ¹ / ₂	9 ¹ / ₂	10 ¹ / ₂	6	4 ¹ / ₂	8
Aug. 9.	6	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	8 ¹ / ₂	9 ¹ / ₂	9 ¹ / ₂	6	3	8
Aug. 16.	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	8 ¹ / ₂	9 ¹ / ₂	9 ¹ / ₂	6	3	8
Aug. 23.	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	8 ¹ / ₂	9 ¹ / ₂	9 ¹ / ₂	6	3	8
Aug. 30.	6	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	8 ¹ / ₂	9 ¹ / ₂	9 ¹ / ₂	6	3	8
Sept. 6.	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	8 ¹ / ₂	9 ¹ / ₂	9 ¹ / ₂	6	1 ¹ / ₂	8
Sept. 13.	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	8 ¹ / ₂	9 ¹ / ₂	9 ¹ / ₂	6	1 ¹ / ₂	8
Sept. 20.	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₂	9	9 ¹ / ₂	9 ¹ / ₂	6	3	8

COURSE OF THE MARKET.

Opened flat, with small demand, and lost 1¹/₂d., but recovered on improved demand; closed steady at advance of 1¹/₂d. for spot and futures.

Opened firm, but became quiet, and gave way 1¹/₂d. for spots and 3¹/₂d. for futures. Manchester flat; "short time." Opened fairly, but subsequently hardened, and closed steady at advance of 1¹/₂d. on spot and 1¹/₂d. for futures. Firm, with hardening tendency; all week; closed at 1¹/₂d. advance on spot, and partially 1¹/₂d. for futures. Opened steadily, but rapidly became flat, and closed weak at a decline of 1¹/₂d. on spot and 3¹/₂d. to 1¹/₂d. for futures. Manchester depressed.

Increased thickness; very small demand; desire to sell; prices 1¹/₂d. to 1¹/₂d. lower for spots and futures. "Short time" extending.

Dull and idle all week; closed at decline of 1¹/₂d. to 3¹/₂d. on spot, and 1¹/₂d. for futures.

Opened steadier, advanced 1¹/₂d., became quieter, and closed dull at the advance.

Dull all week; decline of 1¹/₂d. to 1¹/₂d. in American, partially 1¹/₂d. in Surats, and 1¹/₂d. to 3¹/₂d. in futures. Opened better; more inquiry; closed quiet at advance of 1¹/₂d.; Egyptians depressed, and partially 1¹/₂d. lower.

Opened quiet, and gave way 1¹/₂d., but closed steadier; futures slightly easier.

Opened firm, and improved as week advanced, closing at improvement of 1¹/₂d. to 1¹/₂d. in spot, and 1¹/₂d. in futures. Strong all week. Small American receipts. Declining visible supply. Large trade demand. Prices 3¹/₂d. to 1¹/₂d. higher, spot and futures.

PRICES IN LIVERPOOL AND MANCHESTER EACH WEEK OF 1877.—CONCLUDED.

COURSE OF THE MARKET.

Week ended.	Uplands	Orleans.	Perman.	Rantons.	Egypt.	Dholl.	Oomra.	Bengal.	Common 308 v. r. l.	Common 308 v. r. l.	10s. Mule.	8 1/2-pound Shurtings.
1877.												
Sep. 27.	Mid. 6 1/2	Mid. 6 1/2	Fair. 6 1/2	Fair. 6 1/2	Fair. 6 1/2	Fair. 6 1/2	Fair. 6 1/2	Fair. 6 1/2	9 1/2	9 1/2	10 1/2	8 d. 3
Oct. 4.	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	9 1/2	9 1/2	10 1/2	8 1/2 6 3
11.	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	9 1/2	9 1/2	10 1/2	8 1/2 6 3
18.	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	9 1/2	9 1/2	10 1/2	8 1/2 6 3
25.	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	9 1/2	9 1/2	10 1/2	8 1/2 6 3
Nov. 1.	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	9 1/2	9 1/2	10 1/2	8 1/2 6 3
8.	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	9 1/2	9 1/2	10 1/2	8 1/2 6 3
15.	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	9 1/2	9 1/2	10 1/2	8 1/2 6 3
22.	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	9 1/2	9 1/2	10 1/2	8 1/2 6 3
29.	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	9 1/2	9 1/2	10 1/2	8 1/2 6 3
Dec. 6.	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	9 1/2	9 1/2	10 1/2	8 1/2 6 3
13.	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	9 1/2	9 1/2	10 1/2	8 1/2 6 3
20.	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	9 1/2	9 1/2	10 1/2	8 1/2 6 3
27.	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	9 1/2	9 1/2	10 1/2	8 1/2 6 3

Opened quiet, then improved, then relapsed. Closed quiet at net adv. of 1 1/2 to 1 3/4. In spot; no change for futures. Opened active, owing to steady fluctuations closed 1 1/2 higher spot. First half strong and 1 1/4 to 1 3/4. Higher; second half weak; net result 1 1/2. Higher spot; no change futures. Quiet all week; indifferent buyers; eager sellers; closed steadier 1 1/4 to 1 3/4. Lower on spot; futures unchanged. Quiet; fair demand; freely supplied; closed firm; prices 1 1/4 to 1 3/4. Higher on spot, and 1 1/2. Dearer for futures. Reduced demand; new Uplands 1 1/2. Lower. Orleans unchanged. Long staples easier. Futures 1 1/2. Lower. Opened fairly; Uplands touched 6 1/4. To 6 1/4. Improved second half of week; closed steady at net decline of 1 1/4. Spot. Futures 1 1/2. Advance. Steady first half, quiet remainder; net advance 1 1/4. On spot; decline 1 1/4. For futures.

Opened quiet, but subsequently improved, and closed firm at advance of 1 1/2 to 1 3/4 on spot, and 1 1/2 in futures. Quiet all week, without quotable change in prices, except partial advance of 1 1/4 in Brazils, and 1 1/2 in Surats. Opened steady; second half firm; large business; advance 1 1/2. Spot and futures.

Opened fairly, and gained 1 1/2. On spot, and 1 1/2 to 1 3/4. For futures, became quieter & closed 1 1/2 to 1 3/4. Lower futures. Opened quietly, went flat; lost 1 1/2 to 1 3/4. On spot, 1 1/2. For futures; increased American receipts; unfavorable politics. A broken week owing to holidays, and indisposition to do business owing to uncertain politics; prices lower 1 1/2. Spot, 1 1/2. Futures.

Messrs. Ellison & Co. also furnish the following statement of the average value of all kinds of raw cotton imported, exported, consumed, &c., in Great Britain for the past ten years.

	1877	1876.	1875.	1874.	1873.	1872.	1871.	1870.	1869.	1868.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Import....	61 ₄	61 ₈	71 ₁₆	71 ₂	85 ₈	95 ₁₆	8	95 ₁₆	111 ₁₆	95 ₈
Export....	513 ₁₆	51 ₄	55 ₈	6	7	77 ₈	7	83 ₈	10	813 ₁₆
Consump'n	65 ₁₆	63 ₁₆	71 ₈	75 ₈	83 ₄	913 ₁₆	81 ₈	97 ₁₆	113 ₁₆	97 ₈

CHAPTER IX.

CONSUMPTION OF COTTON IN

EUROPE AND AMERICA.

Year unfavorable for spinners—Eastern war not the cause but the developing influence—How consumption of goods was stimulated—First, by cotton famine—Second, by speculation and free borrowing in United States—Third, speculation and wastefulness everywhere—Fourth, rivalry among spinners—Sudden check in demand and large decrease in consumptive power—Consumption of cotton in Europe for a series of years—More favorable outlook for the manufacturing industry in the United States—Growth in spindles in Europe and America—Ellison's review for 1877—United States crop for 1876-77.

The past year has been an extremely cheerless one to the cotton goods trade. It was, however, begun in hope, for in its earlier days almost every surrounding appeared to favor a return of prosperity, and the little flicker of life which marked the closing months of 1876 seemed to add an earnest of new vigor in the months to come. And yet with all this promise it is scarcely necessary to say that the year's business has been very disappointing, without prospect of relief even to the very end. In fact, the cotton-consuming world is to-day in the situation of a greatly reduced patient, with apparently no recuperative power.

The cause of this condition is a question of the first importance; for it is a very essential point gained if we can learn the nature of the disease we wish to cure. The popular idea has been to charge it all to the war in Eastern Europe. Only let us have peace and the revival will be

instantaneous, has been echoed from every side. This is a very natural inference, because the new depression began with the war; and yet the argument that it will therefore end with it is very inconclusive. Our own commercial distress began with the panic of 1873, and although that storm soon passed off, and in fact is at present almost forgotten, the disorder has really increased every year since, until now it is universally admitted that there was a disease which was not then recognized, and of which the panic was only an outward sign.

Similar in some respects to this experience appears to us to be the relationship which the war in Eastern Europe bears to the present depression in the spinning world. That conflict was certainly the developing influence, but the real cause of the depression seems of deeper origin, accumulating in force for years, and made up of divers elements acting and re-acting upon one another.

Great Britain was for a very long period the manufacturer of cotton goods for the world. During the ten years previous to 1861 the Continent however rapidly attained in this industry an increasingly important position. From an average consumption of 300,000,000 pounds for the five years ending 1855, an average of 627,000,000 pounds was reached by the Continent for the five years ending with 1860; at the same time England increased her consumption from an average of 570,000,000 pounds to 947,000,000 pounds. This very essential addition to the production of cotton goods was decidedly in excess of consumers' wants, and it is an acknowledged fact that when our war broke out the markets of the world were largely overstocked with European manufactures, the war saving English and Continental spinners from a great disaster.

Of course, from 1861 to 1865, the cotton famine checked the progress of this rivalry among European manufacturers,

but during those years another element was being introduced which was to exert a decided influence upon the trade. We refer to the very high prices for cotton, which stimulated its production in all countries, especially in British India, and through the great amount of capital so distributed enlarged their capacity to consume and pay for cotton goods. In our chapter on India we have shown how the people there were literally flooded with money, the returns for their crops. These effects, as we know, continued for years after the war closed, and until the gradually falling price of cotton reduced that capacity very materially.

But out of the same civil contest sprang other consequences of perhaps even greater importance, because more widely diffused. We are all familiar with the financial expedients and results of that war; we know but too well the vast amounts of money expended by the United States Government and people during the latter half of its progress and for six or eight years afterward, and of the speculative forces which were thus set in motion. We know, too, how the lavish disbursements of the Government and an inflation of the currency led to high prices of all commodities and consequently to a seeming acquisition of wealth, which induced a very free purchase of the productions of all other countries. Extravagance and prodigality were almost universal, and we were able to indulge these weaknesses through the many hundred millions of dollars borrowed in Europe by sale of securities. All this acted directly upon producing countries, for we lavishly bought their goods and thus stimulated prices everywhere.

With such demands then, so eager and enlarged as came from the United States and from those countries which had been producing and selling cotton at very high prices, it is not surprising that European manufacturers

should receive an unhealthy impulse. Add to this, however, the further facts contributing to the same end—first, that the values of the staple productions other than cotton, of almost all lands, were at the same time and in the same way enhanced; and, second, that these countries, and also almost every European nation, seemed to partake of this general feeling of prosperity, of wealth accumulating rapidly, and we can easily understand how extreme and unusual the consuming power of the world would be, and how it must have stimulated the spinner everywhere. The commercial history of the American war and its after-results is yet to be written. When it is written, if done faithfully, and the direct and indirect influences and results set out, we shall find that in this day of steam and telegraphy the world has a common centre of life, with a nervous system acutely sensitive in all its parts to every disturbing influence.

But while the events we have related were in progress, still another influence was at work, very decidedly contributing to an undue growth or enlargement of the manufacturing industry. If all the spindles in the world had been in Great Britain, as they substantially were years ago, one can easily see that there would be less danger of their becoming excessive; but when we introduce a rivalry on the part of other nations, first to supply their own consumers and then to secure possession of the outside trade, we can readily understand how an increase once begun might go on in an arithmetical progression, reaching a point finally which would bring the same conditions of trouble in an aggravated form, not in one country alone, but in all. Precisely this has been the history of the spinning industry since the close of our war. Every nation in Europe has been building spindles; consumers that England used to supply, are now not only

supplying themselves, but competing with her everywhere, even in Liverpool. This fact was referred to by the President of the Manchester Chamber of Commerce, at their annual meeting held on the 4th of February, 1878. He stated that foreign competition was one of the principal causes of the present depression of trade. And speaking of portions of the Continent, he further remarked that "Germany, Austria, Italy and Holland had lessened their imports of woven goods; while Belgium was so nearly England's equal, that it had exported both woven goods and yarn into Great Britain for several years," and much more to the same effect.

What a picture of quickened, unhealthy growth and of certain final involvement do all these facts present. We have first our own cotton ports shut up and such high prices ruling for the raw material as to make other producing countries almost beside themselves over the capital pouring in upon them for their produce. Next comes the United States, with its delusion of inflation and fancied wealth, borrowing its millions upon millions from Europe and throwing them back with lavish hand for productions at highly remunerative prices. At the same time the feeling of exhilaration consequent upon an apparent rapid increase in wealth begins to widen;—in Europe, because they could sell more than they could produce, at high prices, in China, because their teas had appreciated in value and were in active demand; and in other countries for similar reasons. Every one of these agencies, as we can see, must have helped to enlarge the capacity of the world to consume goods and thus to stimulate the demand. Then arose the renewed rivalry—if we may call it such—among manufacturing nations, and out of it all a growth in spindles necessarily everywhere very rapid, on the Continent, in England, in the United States, and finally in

India. To show in brief the progress made in the consumption of cotton in Europe and America we give the following summary of the average takings of spinners in periods of five years.

CONSUMPTION OF EUROPE AND AMERICA, IN MILLIONS OF POUNDS.

	'46-50.	'51-55.	'56-60.	'61-65.	'66-70.	'71-75.	Two Years, '76-77.
Great Britain...	569·8	750·1	947·3	628·6	973·8	1,228·6	1,253·5
Rest of Europe..	300·4	451·4	627·4	455·4	653·4	856·6	952·6
United States...	240·5	281·4	358·8	481·2	381·9	524·7	610·9
Total.....	1,110·7	1,482·9	1,933·5	1,265·2	2,009·1	2,609·9	2,817·0

The extent of these takings compared with previous periods we indicate in the following.

Increase in	1866-70.	1871-75.	1876-77.
Compared with 1846-50	80·89	134·98	153·62
Compared with 1851-55	35·48	76·00	89·97
Compared with 1856-60	03·91	34·98	45·69

This makes the increase in the takings since 1860 over 45 per cent; and it will be remembered that even in 1860 the producing power was in excess of the consuming capacity, and that manufacturers were only saved from disaster at that time by the breaking out of our war. But to set out the progress more definitely and plainly, we have procured from Mr. B. F. Nourse, of Boston, a statement of the probable actual consumption each year since 1859-60, made up from the takings on the basis of the spinning capacity and the presumable annual increase in spindles. In the CHRONICLE of July 31, 1875, we published a similar table for the five years (calendar), 1870 to 1874, inclusive. These have been reconstructed for the seasons by the same rule that governed their first computation, going back to 1859-60, and adding 1875-6 and 1876-7, to complete a period of eighteen years, for comparison with the table of deliveries, imports, &c., given subsequently.

Season.	Great Britain.			Continent.			Total.		
	Thousands of bales.	Average weight.	Millions of lbs.	Thousands of bales.	Average weight.	Millions of lbs.	Thousands of bales.	Average weight.	Millions of lbs.
1859-60.	2,457	129	1,053.9	1,635	118	688.3	4,092	126	1,742.2
1860-61.	2,404	126	1,023.9	1,631	115	677.0	4,035	122	1,700.9
1861-62.	1,481	393	588.7	1,079	387	416.8	2,560	393	1,005.5
1862-63.	1,275	368	463.8	997	365	364.0	2,272	367	833.8
1863-64.	1,501	355	532.5	1,083	348	376.3	2,584	352	908.8
1864-65.	1,918	361	691.7	1,327	348	461.1	3,245	355	1,152.8
1865-66.	2,313	369	852.7	1,622	349	567.4	3,935	361	1,420.1
1866-67.	2,738	374	1,024.0	1,947	350	681.4	4,685	371	1,705.4
1867-68.	2,671	355	947.5	1,977	350	691.9	4,648	353	1,639.4
1868-69.	2,754	358	985.9	1,694	345	584.4	4,448	353	1,570.3
1869-70.	2,760	386	1,065.4	1,712	370	633.4	4,472	380	1,698.8
1870-71.	2,911	386	1,122.2	2,015	378	762.6	4,926	382	1,884.8
1871-72.	3,190	378	1,205.8	2,253	365	822.8	5,443	373	2,028.6
1872-73.	3,229	382	1,233.5	2,202	369	812.7	5,431	377	2,046.2
1873-74.	3,190	392	1,251.2	2,221	371	825.6	5,411	381	2,076.8
1874-75.	3,131	391	1,235.3	2,346	382	896.2	5,477	389	2,131.5
1875-76.	3,017	418	1,270.3	2,390	402	961.1	5,407	413	2,231.4
1876-77.	3,136	406	1,273.3	2,402	396	951.2	5,538	402	2,224.5
Total.	16,076	387	17,827.6	32,533	374	12,174.2	78,609	382	30,001.8

These figures are intended to represent the actual consumption. But the capacity of Europe to manufacture goods is now very considerably in excess of these totals. Mr. Ellison gives it as follows.

CONSUMING POWER OF EUROPE.

	Number of Spindles.	Pounds per Spindle.	Total Pounds.	Bales of 100 pounds
Great Britain	39,500,000	33	1,303,500,000	3,258,000
Continent.....	19,500,000	53	1,033,500,000	2,584,000
Total	59,000,000	40	2,337,000,000	5,842,000

These statements show how many idle spindles there are, or (the fact of chief interest to us in this connection) the actual extent to which the growth of the spinning power has been forced. For instance, in 1859-60 Europe consumed 1,742,200,000 pounds of cotton. This was in excess of the world's wants at that time. To-day the position is about as follows:—(1) the spinners of Europe have the power to consume 2,337,000,000 pounds, which is an increase of power equal to 1,500,000 bales of 400

pounds each, (2) the United States have the spindles to manufacture fully 700,000 bales, and India about 200,000 bales (all of same weights) more than in 1860. Thus we have in these countries an increased spinning power during the period mentioned of about 2,400,000 bales of cotton.

Such has been the progress made and the results reached under the incentives we have briefly referred to. Of course, there should be from year to year a regular increase in the demand for goods and in the world's spinning power. But here we have unusual stimulants applied and an extraordinary development attained. Were the producers and consumers confined to a limited district we could easily see that a check to a growth so forced would be inevitable, for it is the history of almost every decade. With, however, the whole world as the field for obtaining consumers, we are apt to think of a constantly growing, or at least of an unobstructed demand, because of its extent and diversity, favorable influences in one nation compensating for unfavorable ones in another. To understand, then, the present situation, we must remember, in connection with this extreme growth in spinning power, the wonderful changes which have taken place in the condition of consumers almost everywhere.

First, notice the effect of the decline in the price of cotton. In 1862, Fair Surats averaged 12½d.; in 1864 the average reached 21½d.; from that point the decline was pretty regular, (with the exception of some recovery in 1872 and in 1873), until in 1876 the average was 4½d. In the delirium excited by the high rates during our war and subsequently, India, out of her crops, had money enough even to waste on silver ploughshares; now the return barely supplies the necessities of life. All other cotton-producing countries are to the extent of their production of this staple

in a similar comparative condition, the very high prices of a few years ago giving them the idea of unbounded wealth, and the constantly shrinking prices later, and especially since 1872, making them realize the urgency for strict economy. Acting in the same direction also (only less in degree) is the decline in the values of productions other than cotton. As a general indication of this, notice the lower wages prevailing in Europe now and the continued downward tendency. It is unnecessary to specify a trade, for it pervades almost all; but we may mention the iron industry as a good illustration. Nor are the lower prices confined to Europe alone. China, a great consumer of cotton goods, is fair evidence of the wide extent of the present depression, her teas having depreciated largely during the past few years.

But, besides all this, suddenly the people of the United States stop spending money in Europe. We have already referred to the immense sums we so lavishly wasted there because it was so easily borrowed. Now, we are all economizing to make good the waste. But even when that necessity for economy is passed, there will be no revival in its full extent of the American demand on Europe for cotton goods. In the first place, the old delirium will never return; and besides, even if that were possible, we are in a condition to supply ourselves more nearly and more cheaply than formerly, and think we have also a very considerable surplus to furnish other countries at prices which will enable us to compete with the great producing nations. India, also, as we have seen, is engaged in building spindles, and hereafter will supply a larger share of her reduced consumption.

Thus, at the moment when the producing power had reached so inflated a position, the consuming capacity is found to be very materially contracted—not only shorn of

its over-excited element, but forced below even a normal condition. This crisis, or concurrence of unfavorable influences, has not, as we have seen, been the outgrowth of the Eastern war, but is the natural result of a disease which is running its course. Undoubtedly the war has increased the disturbance; and just to that extent, but no further, will peace act as a restorative. The whole issue as to the future takings of spinners is wrapped up in the inquiry, how far can the consuming world at this time find the means with which to pay for the cotton fabrics which the existing power can produce. In one particular, at least, the answer can be by no means uncertain: that is to say, at old prices the old consumption cannot be for the present re-established. The facts we have set out above would seem to put this point beyond all controversy. To what extent the lower prices now ruling will permit it, time alone can determine. That inquiry we cannot pursue, as it is wholly within the realm of conjecture.

For the purpose of further illustrating the points discussed above, we have prepared the following three pages.

The first page* is from Mr. Ellison's circular of October last, and shows the World's total cotton supply, &c.†

The second page gives the European deliveries, as stated by Messrs. Ellison & Co. and by M. Ott-Trumpler.‡

The third page shows the percentages of each kind of cotton contained in these deliveries.

* This table includes the total American crop for each season, and consequently the quantity lost at sea and that shipped to Mexico, &c. The deliveries for European consumption therefore differ slightly from those given in the table on the next page, which contains the known imports into Europe only. The American deliveries include cotton burnt or lost within the United States, and also forwarded to Canada.

† In the second of these tables the European figures of deliveries for seasons previous to 1870-71, and in the first table for the seasons previous to 1873-74, do not include cotton other than American imported into Spain and Russia. Ellison estimates the deliveries thus omitted in the first table to be about 108,000 bales in 1867-68; 109,000 bales in 1868-69; 98,000 bales in 1869-70; 120,000 bales in 1870-71; 170,000 bales in 1871-72; and 88,000 bales in 1872-73.

SUPPLY AND CONSUMPTION IN GREAT BRITAIN, CONTINENTAL EUROPE, AND THE UNITED STATES DURING THE SEASONS 1875-16 TO 1876-77, IN 1,000'S OF BALES.

Season, 1st October to 30th September.	Stock beginning of Season.		SUPPLY.				Total Supply and Stock.	DELIVERIES FOR CONSUMPTION.						
	United States.	Europe.	United States Crop.	Import other sorts into Europe.	Total.	Total.		Weekly Average (in bales).						
						United States.		Great Britain.	Confi- ment.	Total.	United States.	Great Britain.	Confi- ment.	Total.
1876-77.	120	1,168	4,485	2,219	6,704	7,992	1,439	3,119	2,283	6,871	27,673	60,359	43,901	131,936
1875-76.	66	1,226	4,669	2,306	6,975	8,297	1,357	3,017	2,605	6,979	26,046	58,019	50,006	134,211
1874-75.	108	1,274	3,833	2,717	6,550	7,932	1,191	3,077	2,369	6,640	22,961	59,173	45,578	127,692
1873-74.	91	1,220	4,170	2,762	6,932	8,243	1,315	3,119	2,397	6,861	23,289	60,557	46,096	131,912
1872-73.	55	1,186	3,930	2,188	6,418	7,959	1,211	3,335	2,099	6,618	23,316	61,135	40,365	127,846
1871-72.	105	760	2,971	3,680	6,654	7,519	1,067	3,132	1,779	5,978	20,519	60,230	31,212	114,961
1870-71.	60	739	4,352	2,383	6,735	7,551	1,140	3,222	2,327	6,689	21,923	61,961	41,750	128,634
1869-70.	12	583	2,179	5,631	6,229	9,28	2,760	2,760	1,722	5,410	17,846	53,977	33,115	104,038
1868-69.	38	614	2,439	3,110	5,549	6,201	1,017	2,877	2,002	5,606	19,557	49,750	38,400	107,807
1867-68.	80	1,092	2,499	2,554	5,053	6,225	881	2,822	1,867	5,573	17,000	51,269	35,901	107,173
1866-67.	282	1,113	2,204	2,601	4,805	6,230	853	2,411	1,791	5,058	16,401	46,423	31,442	97,269
1865-66.	218	317	2,314	3,156	5,470	6,065	733	2,319	1,588	4,610	14,096	41,596	50,538	89,230
1864-65.	228	1,244	3,826	1,058	4,884	6,356	873	2,635	1,776	5,251	16,212	49,232	32,922	100,846
1863-64.	149	751	1,821	992	3,816	6,716	972	2,560	1,712	5,244	18,692	41,903	29,327	89,057
1862-63.	103	613	3,694	791	4,785	5,331	927	2,179	1,525	4,631	17,827	41,903	29,327	89,057
1861-62.	49	527	3,239	798	4,037	5,413	595	1,981	1,291	3,867	17,412	38,096	24,827	74,365
1860-61.	61	796	3,056	1,112	4,168	5,028	819	2,217	1,386	4,452	15,750	43,211	26,654	85,615
1859-60.	113	690	3,645	746	4,391	5,224	770	2,170	1,424	4,361	14,808	41,731	27,384	83,923
1858-59.	135	1,112	2,932	665	3,397	4,844	681	2,130	1,200	4,011	13,096	40,961	23,077	77,134
1857-58.	135	1,141	3,035	631	3,669	4,948	716	1,871	1,111	3,701	13,769	36,039	21,365	71,173
1856-57.	91	769	3,353	915	4,297	5,129	782	1,878	1,189	3,849	15,038	36,115	22,866	74,019
1855-56.	125	852	3,090	607	3,697	4,577	684	1,877	1,156	3,717	13,151	36,096	22,231	71,481
1854-55.	128	752	3,090	607	3,697	4,577	684	1,877	1,156	3,717	13,151	36,096	22,231	71,481
1853-54.	125	852	3,090	607	3,697	4,577	684	1,877	1,156	3,717	13,151	36,096	22,231	71,481
1852-53.	128	752	3,090	607	3,697	4,577	684	1,877	1,156	3,717	13,151	36,096	22,231	71,481
1851-52.	125	852	3,090	607	3,697	4,577	684	1,877	1,156	3,717	13,151	36,096	22,231	71,481
1850-51.	168	729	2,415	630	3,075	3,972	467	1,667	958	3,092	32,057	29,577	18,423	59,961
1849-50.	155	995	2,179	693	2,863	4,015	570	1,538	1,010	3,115	10,961	29,558	18,961	60,019
1848-49.	171	820	2,808	472	3,280	4,271	598	1,537	986	3,121	11,500	29,558	18,961	60,019
1847-48.	215	639	2,421	419	2,843	3,667	600	1,315	782	2,706	9,546	25,288	15,039	52,038
1846-47.	107	923	1,860	381	2,241	3,271	512	1,200	705	2,417	9,846	23,077	13,558	46,481
1845-46.	94	1,349	2,170	377	2,547	3,990	491	1,561	908	2,960	9,143	30,019	17,461	56,923

DELIVERIES OF COTTON IN EUROPE—In Thousands of Bales.

Years.	TO GREAT BRITAIN.						TO CONTINENT.						TO ALL EUROPE.							
	America.	E. India.	Brazil.	Egypt.	Sundries.	Total.	America.	E. India.	Brazil.	Egypt.	Sundries.	Total.	America.	E. India.	Brazil.	Egypt.	Sundries.	Total.	Average weight.	Total weight.
1876-7.	1,990	407	416	286	50	3,119	1,023	862	63	155	152	2,255	3,013	1,269	479	441	202	5,404	406.8	2,198,620,000
1875-6.	1,918	479	238	298	54	3,017	1,184	916	109	166	178	2,553	3,132	1,395	347	461	232	5,370	412.3	2,296,661,000
1874-5.	1,606	668	461	245	97	3,077	981	917	154	85	171	2,341	2,587	1,615	615	330	271	5,418	386.3	2,093,100,000
1873-4.	1,701	660	413	285	90	3,149	1,021	874	187	91	196	2,369	2,722	1,531	600	376	286	5,318	386.7	2,133,819,000
1872-3.	1,654	737	509	306	129	3,335	890	790	231	101	181	2,193	2,544	1,527	740	407	310	5,328	376.8	2,083,278,000
1871-2.	1,412	658	668	239	155	3,432	671	726	298	65	221	1,981	2,083	1,381	966	301	376	5,113	356.1	1,820,870,000
1870-1.	1,925	558	379	241	119	3,222	1,118	753	212	96	186	2,365	3,043	1,311	591	337	305	5,587	386.9	2,161,724,000
1869-70	1,304	831	361	168	93	2,760	608	623	165	58	173	1,627	1,912	1,457	526	226	266	4,387	374	1,610,738,000
1868-9.	877	913	493	175	129	2,587	545	850	191	61	269	1,916	1,4	1,763	684	236	398	4,503	355	1,598,565,000
1867-8.	1,197	799	533	182	111	2,822	538	723	175	69	277	1,732	1,735	1,522	708	251	388	4,601	361	1,675,856,000
1866-7.	1,016	815	298	160	125	2,414	532	777	152	55	217	1,733	1,548	1,592	450	215	342	4,117	371	1,538,537,000
1865-6.	846	878	259	186	150	2,319	391	755	164	69	237	1,616	1,237	1,633	423	255	387	3,935	365	1,436,275,000
1864-5.	187	850	263	285	348	1,873	49	637	121	89	286	1,182	236	1,487	324	374	634	3,655	355	1,684,525,000
1863-4.	178	620	134	219	414	1,565	61	513	71	106	246	1,033	242	1,163	208	325	660	2,598	352	914,496,000
1862-3.	99	905	111	163	54	1,332	34	559	49	64	108	814	133	1,46	160	227	162	2,146	367	787,582,000
1861-2.	301	675	101	122	15	1,217	258	415	21	42	40	776	562	1,090	122	164	55	1,993	393	783,219,000
1860-1.	2,170	249	—	193	—	2,612	1,273	425	—	78	—	1,776	3,443	674	—	271	—	4,388	422	1,851,736,000
1859-60.	2,135	207	—	218	—	2,560	1,275	385	—	55	—	1,712	3,407	592	—	273	—	4,272	426	1,819,872,000

PERCENTAGE OF EACH KIND OF COTTON CONTAINED IN THE DELIVERIES ON PREVIOUS PAGE.

Years.	GREAT BRITAIN.					Total.	CONTINENT.					Total.	ALL EUROPE.					Total.	
	America.	East India.	Brazil.	Egypt.	Sundries.		America.	East India.	Brazil.	Egypt.	Sundries.		America.	East India.	Brazil.	Egypt.	Sundries.		
1876-7.....	63.19	12.93	13.21	09.80	01.59	100.00	45.37	18.23	02.79	00.87	06.74	100.00	55.75	9.27	22.44	08.86	03.16	03.74	100.00
1875-6.....	61.57	15.87	07.69	09.88	01.79	100.00	46.38	35.88	01.27	00.60	00.97	100.00	56.23	25.01	06.23	08.33	04.17	00.00	100.00
1874-5.....	52.20	21.71	11.98	07.96	03.15	100.00	41.91	40.45	06.58	03.63	07.43	100.00	17.75	29.81	11.35	05.09	05.00	00.00	100.00
1873-4.....	54.02	20.96	13.11	09.05	02.86	100.00	43.10	36.89	07.90	03.81	08.27	100.00	49.33	27.80	10.87	06.82	05.18	00.00	100.00
1872-3.....	49.59	22.10	15.26	09.18	03.87	100.00	40.59	36.02	10.33	01.61	08.25	100.00	16.02	27.62	13.39	07.36	05.61	00.00	100.00
1871-2.....	45.08	21.01	21.33	07.63	04.95	100.00	33.87	36.65	15.04	03.28	11.16	100.00	40.71	27.07	18.89	05.95	07.35	00.00	100.00
1870-1.....	59.75	17.32	11.76	07.48	03.69	100.00	47.27	31.81	08.96	01.06	07.87	100.00	54.47	23.46	10.58	06.03	05.46	00.00	100.00
1869-70.....	47.21	30.22	13.08	06.09	03.37	100.00	37.35	38.29	10.14	03.57	10.63	100.00	43.59	33.21	11.99	05.15	06.06	00.00	100.00
1868-9.....	33.90	35.29	19.06	06.76	04.99	100.00	28.45	44.36	09.97	03.18	14.01	100.00	31.58	39.15	15.19	05.24	08.81	00.00	100.00
1867-8.....	42.12	28.31	18.89	06.45	03.93	100.00	30.19	40.57	09.82	03.71	15.55	100.00	37.46	33.06	15.38	05.15	08.43	00.00	100.00
1866-7.....	42.09	33.76	12.31	06.63	05.18	100.00	30.70	41.81	08.77	03.17	12.52	100.00	37.33	38.39	10.85	05.18	08.25	00.00	100.00
1865-6.....	36.48	37.86	11.17	08.02	06.17	100.00	21.26	46.72	10.15	01.27	14.66	100.00	31.11	41.56	10.75	06.48	09.83	00.00	100.00
1864-5.....	09.98	45.98	10.84	15.22	18.58	100.00	01.14	53.89	10.24	07.53	21.20	100.00	07.73	48.67	10.61	12.21	20.75	00.00	100.00
1863-4.....	11.37	39.62	08.57	13.99	26.45	100.00	06.26	52.57	07.16	10.26	23.81	100.00	09.31	41.77	08.01	12.51	25.10	00.00	100.00
1862-3.....	07.43	67.91	08.33	12.21	04.06	100.00	01.18	68.67	06.92	07.86	13.27	100.00	06.26	68.22	07.45	10.58	07.55	00.00	100.00
1861-2.....	21.98	55.16	08.30	10.63	01.23	100.00	33.25	53.48	02.71	05.11	05.15	100.00	28.20	51.69	06.12	08.23	02.76	00.00	100.00
1860-1.....	83.08	09.53	—	07.39	—	100.00	71.68	23.93	—	04.39	—	100.00	78.46	15.36	—	06.18	—	00.00	100.00
1859-60.....	23.10	08.80	—	08.52	—	100.00	71.36	22.49	—	03.21	—	100.00	79.75	13.86	—	06.39	—	00.00	100.00

CONSUMPTION IN THE UNITED STATES.

There have been no mill returns obtained of the consumption of the cotton mills in the United States later than our own figures for 1875. Of course, the annual cotton crop reports since then show the actual deliveries, but those totals include the takings for all other purposes as well as spinning. The details of our figures for the year ending July 1, 1875, were as follows:

COTTON MILLS AND COTTON CONSUMPTION IN THE UNITED STATES.

STATES.	No. of Mills.	No. of spindles	Average size of yarn.	Average running time.	Average consumption of cotton per spindle.	Quantity of cotton used.	Quantity of cotton used.
			No. w'ks.	lbs.	lbs.	Bales.	
NORTHERN—							
Maine	27	633,944	23-14	50-50	53-00	33,693,236	72,421
N. Hampshire. .	36	815,709	22-66	50-22	70-25	57,326,126	123,535
Vermont	10	46,314	29-55	50-54	51-51	2,372,420	5,513
Massachusetts .	206	3,775,631	28-69	16-17	55-33	208,894,352	450,204
Rhode Island..	129	1,438,479	33-88	48-00	42-69	61,109,470	132,348
Connecticut....	108	889,781	33-66	47-20	51-12	45,492,513	98,014
New York.....	60	615,205	36-38	49-65	46-30	28,473,169	61,365
New Jersey....	22	178,928	29-13	50-83	57-62	10,114,300	21,798
Pennsylvania..	60	451,900	18-07	13-62	69-85	31,572,305	68,014
Delaware	8	48,276	23-17	52-00	69-96	3,358,162	7,246
Maryland	20	127,352	11-05	47-88	168-25	21,368,020	46,052
Ohio	4	13,000	8-00	43-50	135-69	1,761,000	3,802
Indiana	4	22,988	15-70	18-55	141-80	3,261,340	7,029
Total North..	694	9,057,543	28-42	47-52	56-25	509,009,613	1,097,001
SOUTHERN—							
Alabama	14	58,480	12-75	45-50	114-51	6,756,170	14,561
Arkansas.....	2	1,781	10-38	16-34	73-56	132,100	285
Georgia	47	131,310	12-87	16-35	177-39	23,299,303	50,214
Kentucky	3	9,514	6-92	50-45	254-40	2,420,362	5,216
Louisiana	3	2,260	8-50	50-00	315-50	713,033	1,537
Mississippi....	9	18,256	11-07	16-00	110-60	1,990,500	4,291
Missouri.....	3	19,700	11-85	16-05	140-52	2,810,185	6,057
North Carolina	31	54,500	11-28	13-97	121-72	6,694,641	14,428
South Carolina	18	70,282	4-00	51-15	137-57	9,671,028	19,945
Tennessee	40	55,384	11-66	13-17	121-85	6,701,718	14,443
Texas	2	5,700	12-00	50-63	172-34	982,365	2,117
Virginia	9	54,624	15-22	51-63	115-85	5,560,835	11,985
Total South..	181	481,821	12-67	49-07	140-57	67,733,140	145,079
RECAPITULATION							
Total North..	694	9,057,543	28-42	47-52	56-25	509,009,613	1,097,001
Total South..	181	481,821	12-67	49-07	140-57	67,733,140	145,079
Grand total..	875	9,539,364	27-60	47-60	60-46	576,742,753	1,242,080

For the sake of comparison, we bring forward our figures for previous years, giving the totals of the main items.

	Spindles.	Yarn, Average.	Average per Spindle.	Total Consumption.	
				Pounds.	Bales.
1875.					
North.....	9,057,513	28.42	56.25	509,000,613	1,097,001
South.....	481,821	12.67	140.57	67,733,140	145,079
Total 1875..	9,539,364	27.60	60.46	576,742,753	1,242,080
1874.					
North.....	8,927,754	28.56	56.86	507,790,099	1,094,387
South.....	487,629	12.50	122.53	59,793,774	128,526
Total 1874..	9,415,383	27.73	60.29	567,583,873	1,222,913
1870.					
North.....	6,851,779	28.88	50.87	348,550,000	752,808
South.....	262,221	12.25	124.23	32,575,715	70,358
Total 1870..	7,114,000	28.38	53.57	381,125,715	823,166
1869.					
North.....	6,538,494	28.00	60.70	396,886,586	855,359
South.....	225,063	12.88	138.12	31,085,702	67,000
Total 1869..	6,763,557	27.50	63.28	427,972,288	922,359

The actual *takings* for all purposes from 1873 to 1877 have been as follows.

	1873.	1874.	1875.	1876.	1877.
Taken by—	Bales.	Bales.	Bales.	Bales.	Bales.
Northern mills.	1,063,465	1,177,417	1,062,522	1,211,598	1,288,118
Southern mills.	137,662	128,526	145,079	145,000	147,000
Total takings from crop..	1,201,127	1,305,943	1,207,601	1,356,598	1,435,118

GOODS MANUFACTURED.

The statement of kinds and quantities of goods manufactured is necessarily incomplete. We do not claim that these results are as exact as the returns of consumption. Spinners are frequently unwilling to state their production except in gross, which we are required to divide up on information otherwise acquired. The statement may be taken, however, for as close an approximation as the nature of the case will permit, and is as follows for 1874 and 1875.

COTTON GOODS MANUFACTURED IN THE UNITED STATES [000s omitted.]

Year ending July 1, 1875.	New England States.	Middle & Western States.	Total North'm States.	Total Southern States.	Total United States.
Threads, yarns, and twines, (lbs.).....	45,000	19,000	64,000	19,000	83,000
Sheetings, shirtings and similar plain goods (yds.)	540,000	94,000	634,000	92,000	726,000
Twilled and fancy goods, Os- naburgs, Jeans, &c., (yds.) ..	180,000	46,000	226,000	21,000	247,000
Print cloths (yds.)	646,000	109,000	719,000	.....	749,000
Ginghams (yds.).....	30,000	5,000	35,000	.....	35,000
Ducks (yds.).....	12,000	16,000	28,000	.....	28,000
Bags (number).....	8,000	2,000	10,000	.....	10,000
Year ending July 1, 1874.					
Threads, yarns, and twines, (lbs.).....	32,000	29,000	61,000	18,000	79,000
Sheetings, shirtings and similar plain goods (yds.)	520,000	90,000	610,000	97,000	707,000
Twilled and fancy goods, Os- naburgs, Jeans, &c. (yds.) ..	204,000	80,000	284,000	22,000	306,000
Print cloths (yds.).....	481,000	107,000	588,000	.....	588,000
Ginghams (yds.).....	30,000	3,000	33,000	.....	33,000
Ducks (yds.)	14,000	16,000	30,000	.....	30,000
Bags (number).....	5,000	1,000	6,000	.....	6,000

FUTURE PROSPECTS OF UNITED STATES SPINNERS.

There are reasons why spinners in this country appear to us to be much more favorably situated with regard to the future than European spinners. The economies in manufacture which the depression we have passed through has taught us, added to the advancement we have made in machinery during the ten years previous to the panic, have put us into a position for more successfully competing with European spinners than ever before, not only for the trade of the United States, but also for that of other countries. In the first place, it is not likely that foreign dry goods will ever again come here in such abundance as previous to 1873. And in the second place, we hold decided advantages over Europe, if we only have the wisdom to improve them, for all North and South Ameri-

can trade; while in every other country where *quality* is a consideration, our goods have already made for themselves a market. Of course, any new trade is of slow growth, but a close study of what has been done in this respect gives a very hopeful outlook as to what may be done. The actual figures of exports of cotton goods are as follows.

EXPORTS OF COTTON MANUFACTURES FROM UNITED STATES.

Year ending June 30.	1877.	1876.	1874.	1873.
Colored goods . . . (Yds.)	29,111,434	16,488,214	4,600,447	3,585,629
do (Val.)	\$2,446,145	\$1,445,462	\$660,262	\$596,912
Uncolored goods . . (Yds.)	76,720,260	59,319,267	13,237,510	10,187,145
do (Val.)	\$6,424,154	\$5,314,738	\$1,686,297	\$1,655,116
Other manuf's of . . (Val.)	\$1,310,685	\$962,778	\$744,773	\$695,500
Total cotton manufactures exported . . (Val.)	\$10,180,984	\$7,722,978	\$3,091,332	\$2,947,528

Here is a rise in four years from three millions in value to ten millions. The total even now is of course very small, but it is highly encouraging, for time and experience alone can acquaint us with the wants of any trade; and besides, this growth has been reached in spite of the very many obstacles which have been interposed by ourselves. We must remember that the margin for profit is of necessity small. Hence every impediment, however trifling, to the freest, cheapest intercourse with nations wanting our goods, cripples or fetters to that extent the trade. What then we require is to have our navigation laws changed and reciprocal trade fostered; or in a word, we need to have every facility offered for making freights cheap and for securing the fullest and freest intercourse. When this has been done, our country will experience an industrial development hitherto unknown to us.

In the following pages we give in full the last annual circular of Messrs. Ellison & Co., for the year of 1876-77, with a brief notice of the results as to past and prospective consumption reached in their 1st of January circular.

ELLISON & CO.'S ANNUAL REVIEW OF THE COTTON
TRADE FOR THE SEASON 1876-'77.

Twelve months ago we stated that the season 1875-'76 had been one of the most disappointing and unsatisfactory periods in the recent experience of the cotton industry. The season which has just closed has been quite as unsatisfactory and even more disappointing than its immediate predecessor, inasmuch as after several years of depressed markets and unprofitable trade, it was thought that a change for the better could not be far distant. Apparently, Europe was just beginning to recover from the effects of the widespread crisis of 1873, brought about by the excessive trading and extravagant speculations of 1870-'72, and during the first three or four months of the season there were symptoms of renewed healthy activity in various directions; but these movements were based upon the expectation that the threatened outbreak of hostilities between Russia and Turkey would be averted; and the moment war became certain a reaction ensued which left the state of trade in a worse condition even than it was before. During the last eight or nine months of the season the markets have been in a chronic state of over-supply. The after-effects of the commercial and financial disasters which commenced in 1872-'73 have been everywhere visible in the shape of forced reduced expenditure, which has led to a curtailed consumption of all kinds of manufactures. The consumption of cotton goods has not perhaps diminished, nor has it kept very far behind production; but it *has* kept behind, and this slight excess in production, combined with constantly dragging markets, has made selling quite a one sided bargain, and almost invariably compelled the producer to part with his goods at unremunerative rates. It was accepted as certain that peace and settled politics would instantly reverse the positions of buyer and seller, especially as there was a deficit in the supply of the raw material; and this caused producers to keep up the out-turn of their mills, and go on selling what they could at the best prices they could get, until the loss became so great and the stocks of goods so burdensome that (chiefly in July, August and part of September) short time was adopted in the leading manufacturing districts, while the effort to reduce production was further helped by a strike at Bolton. By means of these measures stocks were greatly reduced, and the margin between cotton and goods materially improved—so much so, at all events, that it became less unremunerative to work full than short time, and with few exceptions (aside from the mills closed at Bolton) short time was practically abandoned by the close of September.

COURSE OF THE MARKET, OCT. 1, 1876, TO OCT. 1, 1877.

The market closed quietly on September 30, 1876, with mid

dling upland at 5 15 16d. An extensive business had been done during the first half of August, and prices had advanced to 6 3-16d. from 5 3/4d. touched in July. Thence to the third week in September the demand had fallen off, resulting in a decline to 5 15-16d. There was a temporary increase in the demand in the last week of September, but holders offered their stocks so freely that prices did not gain anything of moment. October opened tamely, under the influence of large receipts at the American ports, and a very apprehensive feeling regarding the future of events in Turkey. Buyers operated very sparingly, holders showed some eagerness to sell, and middling upland receded (October 4) to 5 5/8d., or 1/4d. to 3/8d. lower than the prices touched on August 17, and only 1/2d. on the spot, and 1-16d. to 3-16d. in futures, higher than the low sales of July, which were not only the lowest of the year, but the lowest since 1860. There was very little change during the subsequent fortnight, prices on the 20th October being pretty much the same as on the 4th of the month.

More hopeful views, however, began to be entertained respecting the efforts being made to preserve the peace of Europe. This caused the public to look more closely into the position of cotton on its own merits, and in view of the low prices current and the probability of a reduced American crop, buyers commenced to operate with unusual freedom, both here and in Manchester; but, although the sales for the week ended the 26th October reached 117,820 bales, such was the freedom with which the demand was met that prices only advanced 1-16d. to 1/4d. per lb. on the spot, and 3-16d. to 1/4d. for futures. After so large a business it was thought a pause might ensue, and for a day or two the upward movement ceased, especially as some uneasiness was caused by the ultimatum suddenly delivered to Turkey by Russia; but the news (received on 31st October) of the final arrangement of an armistice between the Porte and Servia removed all hesitation on the part of buyers, and on the 1st and 2d of November the market became quite excited, the sales on the last-named day being estimated at 40,000 bales, with an additional 10,000 bales after official hours. About the same quantity was sold for forward delivery, making a total of 100,000 bales, *an aggregate never before touched in the history of the trade*. The result was an advance of 1/8d. to 1/4d. on the spot, and 1/4d. to 5 16d. for futures. The advance was fully maintained on the 3d and 4th November, though the demand fell off; but less strength was displayed on the 6th, owing chiefly to the desire of speculators to realize the late rise, and a slight reaction took place in futures; but the fall was fully recovered on the 7th, owing to a sharp upward movement in New York, and on the 8th the market again became excited, closing strong at an advance of 3/8d. to 1/2d. per lb. on the week for both

spots and futures, bringing middling upland up to 6 $\frac{3}{4}$ d. on the spot and 6 $\frac{1}{4}$ d. for distant delivery, or 1 $\frac{3}{4}$ d. for "ordinary" and $\frac{7}{8}$ d. to id. for "middling" upon the low sales of July. Meanwhile, the low and medium counts of yarn gained 1 $\frac{3}{4}$ d. to 1 $\frac{7}{8}$ d. per lb., and the current run of 8 $\frac{1}{2}$ lb. shirtings 1s. per piece.

During the subsequent week or ten days the demand fell off, and prices gave way $\frac{1}{2}$ l. for American on the spot and $\frac{3}{8}$ d. for "futures;" but the decline was fully recovered between the 20th and 28th November, owing to the acceptance of the armistice by Turkey, and the publication of the pacific assurances by the Emperor of Russia to the English Ambassador—middling uplands being quoted 6 $\frac{3}{4}$ d. on the spot and 6 $\frac{1}{4}$ l. for distant delivery. Then came a few days of quietness, during which prices gave way about $\frac{1}{2}$ d. per lb., owing to less assuring Continental advices; the absence of any signs in the long-expected reduction in the American receipts, and the desire of sellers to get rid of cotton declared against December deliveries. The decline, however, again brought in buyers, and with decidedly assuring Continental news, favorable Indian advices, and more activity in Manchester, prices, with slight interruptions, tended upwards, until the fall quoted on 21 of December was more than recovered; the final quotations on the last market day of the year (December 29) being 6 11-16l. for middling upland on the spot and 7d. for distant "futures."

This animation led to a large attendance of spinners during the first week of January, especially as the American receipts were falling off so rapidly as to bring the smaller estimates of the crop to the front again. The demand was so extraordinary that the sales for the first six working days of the new year averaged over 30,000 bales per day, and the confidence of operators was so unbounded that prices advanced $\frac{1}{2}$ d. per lb., middling upland being pushed up to 7 3-16l. on the spot and 7 $\frac{1}{2}$ d. for June delivery, while as high as 7 $\frac{3}{4}$ d. was paid for distant shipments—the *highest prices of the season*. Alarmingly low estimates of the American, East Indian and Egyptian crops were current; sanguine views of an early settlement of the Eastern question were in vogue; the large stock of cotton accumulated by consumers was altogether overlooked, and 8d. per lb. for middling upland was calculated upon as certain to be witnessed during the course of the season; but the excitement was too intense to last, and between the 8th and 17th of January the demand fell to very moderate dimensions, speculators hastened to realize the late advance, the idea got abroad that, after all, the American crop might not be very much smaller than the previous one, and prices receded $\frac{3}{8}$ d. per lb. The decline led to an improved demand and a recovery of 3-16d. per lb. between the 17th and 20th of January; but with augmented receipts at the American ports (the weekly figures rising

from 110,000 on the 26th of January to 143,000 and 144,000 on the 21 and 9th of February respectively) the reaction recommenced with more intensity than before, and middling upland fell to 6 9-16d. on the 8th of February, while the sales for the week ended on that day reached only 46 000 bales; but with reduced American arrivals, advancing prices at New York, unfavorable crop accounts from Bombay and an improved business in Manchester, confidence revived, and prices gained 3-16d. between the 8th and 15th of February—middling upland being quoted 6 3-4d. on the spot and 7 1-16d. for distant deliveries.

The improvement, however, was only short-lived. The increased business in Manchester was more apparent than real; the demand for cotton fell off, and with a large import the stock here increased from 829,000 bales on the 15th February, to 1,070,000 on the 22d March. During these five weeks the sales on the spot averaged only 7,600 bales per day. There was no appreciable reduction in the rate of consumption, but with a slow state of trade in Manchester, spinners fell back upon their large surplus stocks. Moreover, they were receiving an average of nearly 11,000 bales per week, direct from the quay. During this period, too, the market was injuriously affected by the pressure to sell March deliveries and cotton declared against shipments; while business in Manchester was restricted by an adverse turn in the Indian exchanges. The result was a decline of 1-4d. to 5-8d. per lb., middling upland receding to 6 1-4d. on the spot, and 6 1-16d. for landing cotton on the 22d March, against 6 3-4d. and 6 11-16d. respectively, on the 13th February. At times there were symptoms of improvement, but they ended in nothing substantial. On the 23d and 24th March there was a little more inquiry, owing to some advance in the Indian exchange; and a better demand in Manchester, but the change for the better disappeared on the 26th, on the announcement of the failure of Messrs. Isaac Low & Co. This event took the public quite by surprise, and fears were entertained that further mischief would follow; the result was an instant decline of 1-16d. to 5-8d. per lb. Middling upland was sold at 6 5-8d. on the spot, and 6d. landing. The low price attracted buyers and the fall was recovered between the 27th and 29th March. The market was closed for the Easter holidays between the 29th March and the 3d April; meanwhile (on the 31st March) the Protocol on Turkish affairs was signed by the various Powers. This gave rise to hopes of a speedy settlement of the Eastern question, and, together with the low prices, led to a large attendance of spinners on the 3d April, resulting in a business of 30,000 bales, and an advance of 1-4d. to 3-16d. in spot prices, and 3-16d. to 1-4d. in futures; but the movement met with no response in Manchester. The demand rapidly fell off, and the whole of

the advance was lost between the 6th and the 9th April. A few days later came the rejection of the Protocol by Turkey, which was taken not only as indicating the certainty of hostilities between Russia and Turkey, but as threatening a general European war. For several days, therefore, the market was exceedingly depressed, especially as the gloom occasioned by political disquietude was intensified by rumors of impending difficulties in the market, and eventually by the announcement of the failure of Messrs. Lockhart & Dempster, who were largely engaged in cotton operations. The result was that between the 9th and the 17th April prices gave way $\frac{1}{4}$ l. per lb. During the subsequent four days rumors that renewed efforts were being made to preserve peace caused an advance of 3-16d.; but the actual declaration of war by Russia dispelled all hopes of hostilities being averted, while the non-committal character of the Emperor's manifesto led to the fear that, in certain eventualities, other Powers besides Russia and Turkey might be drawn into the conflict. The upshot was a demoralized cotton market and a fall of $\frac{1}{4}$ d., middling upland selling on April 27 at 5 13-16d. on the spot, and 5 11-16d. landing. During the subsequent week there was a recovery of 1 16d. to 3-32d., but it was lost the week after; and on the 15th May the quotations for middling upland were 5 $\frac{1}{4}$ d. on the spot, and 5 11-16d. for near deliveries, *the lowest prices of the season.*

The fall in values had now reached nearly $1\frac{1}{2}$ d. per lb. from the highest prices paid in January, and the current rates were only 1-16d. to $\frac{1}{4}$ d. above the low irregular sales made during the most depressed days in the previous season. Buyers, therefore, began to think that little, if any, further decline could reasonably be calculated upon, especially as the prospects for the remainder of the season pointed to the certainty of a serious deficit in supplies, compared with the previous season. Accordingly, after the Whitsuntide holidays (which occurred between the 18th and 23d of May) a rather better inquiry was experienced both here and in Manchester. The improvement was slow at first, but made decided progress during the first fortnight of June, ending in an advance of 9 16d. between the 15th May and the 14th June; middling upland being quoted at 6 5-16d. on the last named date, against 5 $\frac{1}{4}$ d. on the former. The advance led to a pause; buyers in Manchester refused to follow the rise, and spinners having increased their stocks of the raw material, cut down their purchases to very small dimensions. Meanwhile the market was adversely affected by continued apprehensions respecting the future of the Eastern question, and by the increased gravity of political affairs in France, both of which causes were injuring trade in general throughout the world. Between the 14th and 23d of June, therefore, prices lost 3-16d. per lb.; but the react on

again brought in buyers, and the fall was recovered between the 23d and 28th. The hardening tendency continued until the 19th of July, on which day middling was quoted at 6 $\frac{3}{4}$ d. on the spot and 6 7 16d. for distant deliveries.

The upward movement was due entirely to the unmistakably strong statistical position of the market, and received no encouragement whatever from Manchester, where trade was as dull as it could be. It was as clear as anything could be that a further advance in prices could not be prevented except by a reduction in the rate of consumption; but although there had been much talk of "short time" in the manufacturing districts, nothing of importance in that direction had been done. At length the true position of affairs forced itself upon producers, and towards the middle of July the "short time" movement began to make decided progress, and continued to do so during the subsequent month, so much so that it was currently estimated that the weekly rate of consumption for part of July and the whole of August did not materially exceed 50,000 bales per week. Meanwhile, the market was further weakened by the promise of a large new American crop, the failure of the food crops in important districts in India, and by the apparent certainty of a prolonged war in Turkey. A very bad effect was produced, too, by the stoppage of Messrs. Shorrocks, Eccles & Co., of Darwen, announced on the 13th of August. The upshot of these various influences was, that the sales for the five weeks ended August 23 averaged only 41,000 bales per week, and that prices gave way 7-16d. per lb.—middling upland receding to 5 15-16d. on the spot and 5 $\frac{3}{4}$ d. for near deliveries.

At last the reduced rate of production began to make itself felt in Manchester, not in any very pronounced way, but still sufficient to give firmness to prices. This circumstance, and the unfavorable turn taken by the American crop advices, brought out buyers of yarns and goods, and led to a little more business in cotton, but the demand was so freely met that prices gained only 1-16d. per lb. in the last week of August and the first week of September. Little attention was paid to the bad crop accounts, and the improvement in Manchester was reported as being of a very trifling character; but as the month of September advanced the unfavorable crop news became too general to be altogether ignored, while it was also clear that more business had been doing in Manchester than appeared on the surface. Spinners, therefore, became very large operators, especially as they had allowed their surplus stocks to be completely used up, and during the three weeks ended the 27th of September the sales averaged over 80,000 bales per week and prices advanced $\frac{3}{4}$ d. per lb. After so large a business there was less animation between the 27th and 29th of the month, and futures lost 1 16d. to $\frac{3}{4}$ d., but

spot prices remained steady, middling upland being quoted 6½d. per lb. on the last day of the month, being 7-16d. higher than the opening, ½d. higher than the lowest, and 13-16d. lower than the highest prices of the season. The average price for the season is 6¼d., against 6½d. last season.

The following is an account of the principal fluctuations during the season in the leading descriptions of cotton, and in 32's twist and 8¼ lb. shirtings :

	Uplands, Middling.	Deliveries		Perambuco Fair.	Egypt— Fair.	Dholi— Fair.	32's Twist.		Shirtings. 8¼ lbs.			
		Near.	Distant.									
1876.	d.	d.	d.	d.	d.	d.	d.	d.	d.	s.	d.	
Sept. 28....	51½16	513½	578	531	618	4716	888 to 938	6	6	to 8	4½	
Oct. 10....	578	525½	578	558	6	488	858 to 958	6	7½	to 8	6	
Nov. 9....	658	61½32	631	612	678	5	10 to 11	7	3	to 9	0	
“ 18....	638	614	638	6716	624	41316	958 to 1058	7	0	to 8	10½	
“ 22....	624	6916	61116	6216	624	5116	958 to 1058	3	3	to 9	0	
Dec. 2....	6716	6516	6716	612	658	5	958 to 1058	3	3	to 9	0	
“ 29....	61116	638	7	3116	631	5516	10 to 1078	7	4½	to 9	0	
1877.												
Jan. 8....	7316	7316	712	724	7	534	1058 to 1158	7	7½	to 9	3	
“ 17....	61316	62232	7232	7116	678	558	10½ to 11½	7	4½	to 9	0	
“ 20....	7	62932	7216	621	678	51116	10½ to 11½	7	4½	to 9	0	
Feb. 8....	6916	61932	63132	678	658	5916	978 to 1078	7	3	to 9	3	
“ 13....	631	61116	7116	642	658	5916	978 to 1034	7	3	to 9	3	
Mar. 22....	641	6116	6716	642	638	518	878 to 958	6	10½	to 8	9	
Apr. 27....	51316	51116	6132	6316	614	41116	858 to 938	6	9	to 8	9	
May 15....	531	51116	53132	628	618	458	838 to 918	6	3	to 8	6	
June 14....	6516	6932	618	638	614	518	824 to 918	6	7½	to 8	9	
July 19....	638	638	638	638	614	5916	824 to 958	6	6	to 8	6	
Aug. 13....	51316	578	51532	6116	6	5116	812 to 914	6	3	to 8	1½	
Sept. 29....	638	614	6516	638	618	518	918 to 958	6	4½	to 8	4½	

IMPORTS AND STOCKS.

The imports and stocks of the whole of Europe compare as follows, in 1,000's of bales:

	Ameri- can.	East Indian.	Brazil.	Egypt.	Smyr- na.	W. Ind. &c.	Total.
Import—							
1876-77.....	3,019	1,135	414	443	107	90	5,238
1875-76.....	3,206	1,220	402	464	107	113	5,512
Decrease.....	187	85	....	21	....	23	274
Increase.....	....	....	42	....	....	....	....
Stocks, Sept. 30—							
1877.....	575	179	127	67	17	36	1,001
1876.....	570	312	162	65	21	38	1,168
Decrease.....	....	133	35	....	4	2	167
Increase.....	5	....	....	2	....	....	....

DELIVERIES FOR SEVEN SEASONS

The following is a comparative statement of the deliveries in 1,000's of bales during the past seven seasons, with the weight in pounds:

	America.	East India.	Brazil.	Egypt.	Sundries.	Total	Average Weight.	Total weight. Pounds.
GREAT BRITAIN.								
1876-7	1,990	407	416	286	50	3,149	106	1,278,538,000
1875-6	1,948	479	238	298	51	3,017	121	1,270,287,000
1871-5	1,606	668	461	245	97	3,077	389.6	1,198,838,000
1873-4	1,701	660	413	285	90	3,149	391	1,210,766,000
1872-3	1,654	737	509	306	129	3,335	381	1,280,610,000
1871-2	1,412	658	668	239	155	3,132	360	1,127,520,000
1870-1	1,925	558	379	241	119	3,222	392	1,263,024,000
CONTINENT.								
1876-7	1,023	862	63	155	152	2,255	408	920,082,000
1875-6	1,184	916	109	166	178	2,553	402	1,026,374,000
1874-5	981	917	154	85	174	2,311	382	891,262,000
1873-4	1,021	874	187	91	196	2,369	377	893,113,000
1872-3	890	790	231	101	181	2,193	366	802,638,000
1871-2	671	726	298	65	221	1,981	350	693,350,000
1870-1	1,118	753	212	96	186	2,365	380	898,700,000
ALL EUROPE.								
1876-7	3,013	1,269	479	441	202	5,404	406.8	2,198,620,000
1875-6	3,132	1,395	347	464	232	5,570	412.3	2,296,661,000
1871-5	2,587	1,615	615	330	271	5,118	386.3	2,093,100,000
1873-4	2,722	1,531	600	376	286	5,518	386.7	2,133,819,000
1872-3	2,544	1,527	740	407	310	5,528	376.8	2,083,278,000
1871-2	2,083	1,381	966	301	376	5,113	356.1	1,820,870,000
1870-1	3,043	1,311	591	337	305	5,587	386.9	2,161,721,000

The average weekly deliveries in bales were as follows:

	1876-7.	1875-6.	1874-5.	1873-4.	1872-3.	1871-2	1870-1.
GT. BRITAIN.							
American ...	38,274	37,468	30,885	32,711	31,808	27,154	37,019
East Indian...	7,833	9,220	12,846	12,692	14,173	12,654	9,731
Other kinds...	11,452	11,337	15,442	15,154	18,154	20,423	11,211
Total	60,559	58,025	59,173	60,557	64,135	60,231	61,961
CONTINENT.							
American ...	19,681	22,773	18,865	19,635	17,115	12,904	21,500
East Indian...	16,574	17,607	18,212	16,807	15,192	13,961	11,481
Other kinds...	7,110	8,719	7,912	9,116	9,866	11,231	9,500
Total	43,365	49,099	45,019	45,558	42,173	38,096	45,181
Grand total	103,924	107,124	104,192	106,115	106,308	98,327	107,142

The average weight of American packages consumed this year we estimate at 438 lbs., against 441 lbs. last year; of Egyptian, 691 lbs., against 692 lbs.; of Brazil, 164 lbs., against 160 lbs.; of West Indian, &c., 205 lbs. for both years; of Smyrna, 370 lbs. for Great Britain, and 350 lbs. for the Continent, for both years; of East Indian, 334 lbs., against 380 lbs., for Great Britain, and 373 lbs., against 367 lbs., for the Continent.

CONSUMPTION OF GREAT BRITAIN.

It is generally supposed that at the end of August English spinners held only a bare working stock of the raw material. During the four weeks of September they took 258,500 bales (averaging 491 lbs. each) from Liverpool and London. Allowing for the closing of the mills at Bolton, and for "short time" else-

where, it is thought that the actual rate of consumption did not exceed an average of 56,000 bales per week, or a total of 224,000 bales for the four weeks. This would leave a surplus of 34,500 bales, weighing about 13,890,000 lbs., at the end of the month, and also at close of the season, against 8,518,000 lbs. twelve months previously, showing an increase in spinners' stocks of 5,282,000 lbs. this year over last. If we deduct this latter figure from the weight of cotton delivered—1,278,533,000 lbs.—we shall get 1,273,256,000 lbs. as the weight actually consumed, against 1,270,287,000 lbs. last season. The movements for the past five seasons compare as follows:

	Actual weight delivered.	Estimated weight consumed.	Surplus pounds.	Deficit pounds.
1872-73.....	1,280,640,000	1,227,453,000	53,187,000	.....
1873-74.....	1,240,706,000	1,259,836,000	.....	19,130,000
1874-75.....	1,198,838,000	1,224,377,000	.....	25,539,000
1875-76.....	1,270,287,000	1,270,287,000	.....	.....
1876-77.....	1,278,533,000	1,273,256,000	5,282,000	.....

Our estimate of the requirements of the season was 1,297,000,000 lbs., or about 24,000,000 lbs. less than the weight actually consumed; but the loss in spinning American cotton was from 2 to 3 per cent less than in the previous season, and $2\frac{1}{2}$ per cent on the weight of American spun (1,930,260 bales of 433 lbs., or a total of 871,733,880 lbs.) comes to 21,793,000 lbs. So the weight of yarn actually turned out was practically about the same as our estimate.

EXPORTS OF YARNS AND GOODS.

The following is a comparative statement of the export of cotton yarns and piece goods from Great Britain in each of the past ten seasons, ended Sept. 30, in millions of pounds and yards:

	Yarn pounds.	Goods yards.		Yarn pounds.	Goods yards.
1876-77.....	229.9	3,803	1871-72.....	200.5	3,449
1875-76.....	223.2	3,635	1870-71.....	194.0	3,432
1874-75.....	218.1	3,516	1869-70.....	181.5	3,412
1873-74.....	218.5	3,530	1868-69.....	169.3	2,908
1872-73.....	219.2	3,526	1867-68.....	179.6	2,980

The exports for the past season show an increase of 2 per cent in yarn, and 4.6 per cent in piece goods, over those of 1875-76.

THE CONSUMING POWER OF THE CONTINENT.

The following table is based upon answers given to the question, "What is the average consumption of cotton per spindle per annum in your neighborhood when all the machinery is fully at work?" and upon official accounts of the deliveries of cotton for consumption in each country:

	No. of spindles.	Lbs. pr. spindle	Total pounds.	Bales of 400 lbs.	Ave'ge per week.
Russia & Poland.....	2,500,000	65	162,500,000	406,250	7,812
Sweden & Norway.....	310,000	80	24,800,000	62,160	1,195
Germany.....	4,700,000	55	258,500,000	646,250	12,128
Austria.....	1,558,000	67	104,386,000	260,965	5,019
Switzerland.....	1,850,000	25	46,250,000	120,625	2,320
Holland.....	230,000	60	13,800,000	34,500	663
Belgium.....	800,000	60	48,000,000	120,000	2,308
France.....	5,000,000	48	240,000,000	600,000	11,538
Spain.....	1,775,000	48	85,200,000	213,000	4,066
Italy.....	880,000	67	58,960,000	147,100	2,835
Total.....	19,603,000	53.2	1,044,160,000	2,611,150	50,211

CONSUMPTION OF THE CONTINENT.

The above figures differ slightly from those given in the previous reports, but they are more correct. In the following table we give an approximate estimate of the quantity of cotton actually consumed in each country during the past season. Compared with the full rate of consumption as shown above, there is a reduction of $12\frac{1}{2}$ for Russia, 10 per cent for Switzerland, Belgium and Italy, 5 per cent for Germany, France and Spain, and $2\frac{1}{2}$ per cent for Austria.

	No of spindles.	Lbs. pr. spindle	Total pounds.	Bales of 400 lbs.	Ave'ge per week.
Russia & Poland.....	2,500,000	57	142,500,000	306,250	5,889
Sweden & Norway.....	310,000	80	24,800,000	62,000	1,192
Germany.....	4,700,000	53	249,100,000	622,750	11,976
Austria.....	1,558,000	65	101,270,000	253,175	4,868
Switzerland.....	1,850,000	23	42,550,000	106,375	2,016
Holland.....	230,000	60	13,800,000	34,500	663
Belgium.....	800,000	54	43,200,000	108,000	2,077
France.....	5,000,000	46	230,000,000	575,000	11,058
Spain.....	1,775,000	45	79,875,000	199,687	3,810
Italy.....	880,000	60	52,800,000	132,000	2,539
Total.....	19,603,000	50.02	979,895,000	2,399,737	46,118

These figures show an increase of 1.8 per cent over the estimated consumption of 1875-76, against an average increase of 5 per cent in 1875-76 over 1874-75, and 1874-75 over 1873-74. Compared with a full rate of consumption, the quantity of cotton spun in 1876-77 shows a deficit of 6.3 per cent. The movements for the past four seasons compare as follows:

	Actual weight delivered, lbs.	Estim'd wght consumed, lbs.	Surplus pounds.	Deficit.
1873-74.....	893,113,000	872,000,000	21,113,000	
1874-75.....	894,262,000	915,375,000		21,113,000
1875-76.....	1,026,374,000	961,113,000	65,231,000	
1876-77.....	920,032,000	979,895,000		59,863,000

It appears, therefore, that the surplus stock of 65,330,000 lbs., over and above ordinary working requirements, held by spinners twelve months ago, has been reduced to 5,368,000 lbs., or about

13,000 bales of 400 lbs., or about 150,000 bales less than at the close of September, 1876.

But although the stocks of cotton at the mills are much smaller than they were a year since, we should think, from the tenor of our correspondence, that the difference is quite counter balanced by increased stocks of yarns and goods.

CONSUMPTION OF THE UNITED STATES.

The consumption of cotton in the United States continues to make rapid progress, the unsatisfactory state of trade notwithstanding. In reference to the course of business during the past season, the *NEW YORK FINANCIAL CHRONICLE*, in its annual crop statement, issued last month, says:

"The past year has proved far from a satisfactory one for our spinners, notwithstanding they have manufactured goods in increased quantities, and sold them all. Several circumstances have combined to produce this disappointment (for a disappointment it has been since they began the season with a favorable outlook and very hopeful anticipations). In the first place, all trade in the country has been more depressed and spiritless during the past twelve months than during any similar period since the panic. Very naturally, therefore, the demand for cotton goods has, in general, been of a quiet nature, not favorable to all prices; absorbing the production to be sure, but in such a sluggish, hand-to-mouth way, as to keep the seller nearly all the time to the disadvantage of having to force his goods. Then, again, the vagaries of the cotton market have helped to intensify the indisposition to purchase among buyers. When the year began, the price of cotton statistically appeared very low. The last season's consumption and this season's prospective supply clearly showed a deficiency. Consequently, spinners stocked up, and prices of goods improved. But the rumors of war in Europe and finally war itself, changed entirely the situation, giving a drooping tendency to cotton, and of course imparting the same inclination to manufacturers. No one buys largely or eagerly on a falling market, and especially when all trade is depressed."

Allowing for differences in stocks in the Northern interior towns, and deducting the cotton sent to Canada, and that burnt or lost, the deliveries during the past five seasons were as follows:

	1873. Bales.	1874. Bales.	1875. Bales.	1876. Bales.	1877. Bales.
Taken by Northern mills.....	1,063,465	1,177,417	1,062,522	1,211,598	1,288,418
Taken by Southern mills.....	137,662	128,526	145,079	145,000	147,000
Total takings from crop.....	1,201,127	1,305,943	1,207,601	1,356,598	1,435,418

As spinners hold less cotton than they did twelve months since, the consumption has made greater progress even than that indicated in the foregoing statement.

In reference to this increased consumption, the *CHRONICLE* says:

"These figures verify our remarks and the mill-returns which we published some weeks since, showing that the Northern spinners were using increased amounts of cotton. We should remember, however, that increased takings do not necessarily indicate increased yards of cloth manufactured. With cotton at 11 cents per lb., the heavier makes become relatively the cheaper, while our export movement to China, Africa, and South America runs upon heavy fabrics. Furthermore, as we stated a year ago, low prices are enlarging the uses of this staple. For instance, in worsted and knit goods there has been of late years a constantly-increasing proportion of cotton consumed. In these and other ways, the demand for the staple is growing, and especially has this been the case during the past three seasons."

What becomes of a portion of the increased out-turn of

American spindles and looms is shown in the following account of the exports of cotton manufactures from the United States during the years named, ending June 30 :

Years.	PIECE GOODS.			Cotton Manufactures, all kinds, Value.
	Plain, Yards.	Colored, Yards.	Total, Yards.	
1872.....	8,859,191	2,844,888	11,704,079	\$2,304,330
1874.....	13,237,510	4,600,147	17,837,657	3,091,332
1876.....	59,319,267	16,488,214	75,807,481	7,722,978
1877.....	76,720,260	29,111,434	105,831,694	10,180,984

The last complete count of spindles in the United States was made two years ago. There were then 9,057,543 in the North and 481,821 in the South. Since then about 415,000 new spindles have been put up in the North and 100,000 in the South, so that there are now about 9,472,543 in the one section and 581,821 in the other, or a total of 10,054,364 in the United States.

THE AMERICAN COTTON CROP.

The last American crop reached 4,485,423 bales, against 4,669,283 bales in the previous season. The exports to Great Britain amounted to 2,024,877 bales, against 2,081,711 bales, and to the Continent 1,024,620, against 1,172,283. American spinners took 1,435,418, against 1,356,593 bales. The weight of each of the past four crops is estimated as follows by the New York FINANCIAL CHRONICLE, upon returns received from the various Southern shipping ports :

Season of—	CROP.		Average Weight per Bale.
	Number, Bales.	Weight, Pounds.	
1876-77.....	4,485,423	2,100,465,086	468.28
1875-76.....	4,669,288	2,201,410,024	471.46
1874-75.....	3,832,091	1,786,934,765	468.00
1873-74.....	4,170,388	1,956,742,297	469.00

The foregoing are gross weights, and include bands and wrappers. •

THE COTTON MILLS OF INDIA.

According to a recent official report, there are now at work in the cotton mills of India 1,231,000 spindles, and from 10,000 to 11,000 looms. It is not easy to ascertain the weight of cotton consumed by these spindles, as many of the mill companies have declined to fill up the Government forms with the necessary particulars ; but the returns received show an average of 75 lbs. per spindle per annum. On the basis of this average the present rate of consumption is about 92,395,000 lbs., or 237,000 bales of 390 lbs., per annum. The extraordinary progress made by this new branch of Indian industry is shown in the following table :

Year.	Spindles at work.	COTTON CONSUMED.		
		Pounds.	Bales of 390 pounds.	Bales per week.
1861	338,000	25,350,000	65,000	1,250
1874	593,000	44,475,000	114,000	2,190
1875	886,000	66,450,000	170,000	3,270
1876	1,124,000	84,300,000	216,000	4,150
1877	1,231,000	92,325,000	237,000	4,560

It may be that some portion of this increased production by steam power has taken the place of the native hand-made yarns and goods; but most unquestionably the bulk of the out-turn has gone to supply wants that would otherwise have been met by imports from Great Britain.

STATE OF THE COTTON INDUSTRY ON THE CONTINENT.

In September we forwarded printed forms, containing the following list of questions, to correspondents at every cotton port and cotton manufacturing district on the Continent:

1. Has the character of the business of the past season been satisfactory or unsatisfactory, and what causes have influenced the course of trade?
2. What is the present state of the trade, and what are the prospects for the coming season?
3. Has the consumption of cotton in your district increased or decreased, and what do you estimate the difference per cent compared with the previous season?
4. Are the stocks of raw cotton at the mills in your neighborhood larger or smaller than they were at this time last year? If so, what is the approximate difference per cent?
5. Are the stocks of yarns and goods larger or smaller than they were at this time last year? If so, what is the approximate difference per cent?
6. What increase (if any) has there been in the number of spindles in your neighborhood?
7. What is the total number of spindles now in existence in your country, and how many (if any) are not running at the present time?
8. What is the average consumption of cotton per spindle per annum in your neighborhood when all the machinery is fully at work?
9. Please state the number of power looms in your country, and the number of hands employed in spinning and weaving, either by official return or approximately.
10. Your views on other matters of interest to the trade not included in the above questions would also be gladly received.

We take this opportunity of thanking our numerous correspondents for the prompt and hearty manner in which they have answered our questions, and we trust that the perusal of our report will afford them some recompense for the trouble which they have been put to in complying with our wishes.

RUSSIA.

Past Season.—Very favorable for yarns, owing to reduced production, better also for goods but less so than for yarns, owing to stocks of calicoes and prints being heavy at the opening of the season, and the sale slow in consequence of the war. Producers have benefitted by the low exchange, advanced duties, shorter terms of credit, and gradual reduction of stocks.

No increase in spindles. Consumption of cotton reduced in the Moscow district, but no change of moment in the St. Petersburg district. Night work partially suspended during a portion of the

year, but now resumed. Reduced consumption for all Russia; probably not more than 10 to 15 per cent. Stocks of cotton at the mills considerably smaller than last year. Stock at St. Petersburg nearly all sold. Stocks of yarns very small; spinners under contract for some months to come. Stocks of goods much smaller than last year, but large in proportion to yarns.

Prospects—Very uncertain. Everything depends on the chances of peace and the improvement in exchange. There is a fair demand, but the fear is that the rise in prices cannot keep pace with the fall in exchange.

POLAND.

Past Season.—Opened with little doing. The outbreak of the war caused some activity, but the panic in Russia inundated us a terwards with Russian manufactures, and prevented prices from rising. Now everything is better.

No increase in spindles. Consumption about the same as last year. Stocks of raw cotton at the mills 15 per cent to 20 per cent larger. Hardly any stocks of yarns or goods.

Prospects.—Not bad, but the war causes much diffidence; and the depreciation of the Russian currency is also a great drawback.

SWEDEN AND NORWAY.

Past Season.—Very favorable during the greater part of the season, but not so favorable at the close.

A few new spindles have been put up in several mills. The consumption of cotton shows no change of importance. The stock of cotton at the mills same as last year. Stocks of yarns and goods larger.

Prospects.—Not favorable, owing to accumulation of stocks, and dull trade.

GERMANY.

PRUSSIA.—*Past Season*.—Very unsatisfactory, owing to the slow sale and depressed prices of yarns and goods, occasioned by the war, and the consequent stagnation in business. Coarse counts of yarns (2's to 20's) worse than ever known. All attempts to bring about a better state of things, by reducing production, have been frustrated by Manchester competition.

No new mills opened; but some new spindles added to old mills last year have since been put to work. On the whole rather more cotton has been spun this year than last. Stocks of cotton at the mills decidedly reduced. Stocks of yarns and goods very greatly increased.

Prospects.—Present state very unfavorable, owing to the unprecedentedly unprofitable scale of prices. There has been a rather better inquiry within the past month, and a further improvement is expected during the winter. If this hope should not be realized, the present rate of production cannot be continued, as stocks are already very excessive.

SAXONY.—*Past Season.*—Unsatisfactory throughout, owing to the rise in cotton in the early part, and the political disquietude produced by the Eastern war and the critical position of affairs in France.

No change in spindles. Consumption slightly diminished—some say 5 to 10 per cent. Stocks of cotton at the mills reduced; but stocks of yarns and goods vastly increased.

Prospects.—Very discouraging. No signs of improvement. Unless a change for the better comes quickly, the out-turn of the mills will have to be reduced.

BAVARIA.—*Past Season.*—Very unsatisfactory, especially during the second half of the season, owing to the continued after-effects of the financial crisis, the decline in the iron industry, the adverse influence of foreign tariffs, and the unfavorable treaties of commerce of the German Empire. Production in excess of demand. Prices very unprofitable.

No increase in spindles. Consumption of cotton diminished in some mills, but fully maintained in the majority. More American used than last season. Stocks of cotton 30 to 50 per cent smaller. Stocks of yarns and goods rather larger.

Prospects.—Very unfavorable, with little hope of any immediate improvement, owing to the general depression in all departments of trade, and the unseasonable weather for the potato, wine, tobacco and fodder crops.

BADEN.—*Past Season.*—Fairly satisfactory at the opening, but bad later on, and very bad at the close, especially for manufacturers. The adverse influences in operation have been—financial losses, which have forced people to economize; general depression in trade, owing to political disquietude; and over production.

No increase of spindles. One mill with 15,000 spindles burnt down early in the year, but now at work again. Consumption of cotton slightly diminished. The quantity of cotton at the mills much smaller than last year, most mills holding only a bare working stock. Stocks of yarns moderate; stocks of goods enormous in first hands, but very small in second and third hands.

Prospects.—Business lethargic, and no appearance of any early improvement. No likelihood of any amendment until the war is at an end.

ALSACE.—*Past Season.*—Unfavorable, from bad to worse, owing to slow sales and accumulation of stocks, caused by the suppression of protective duties; by the high tariffs of France, Austria and Russia; and by the commercial depression arising out of the political uneasiness occasioned by the crisis in France and the uncertain eventualities of the war in Turkey.

No increase in spindles. Consumption of cotton about the same as last season, though possibly rather less, owing to some mills having gone on to finer numbers. Minor efforts have been

made to reduce production, but they have been too unimportant to notice. Stocks of cotton at the mills greatly reduced; in most cases they now only amount to ordinary working requirements. Stocks of goods largely increased, and now unusually heavy.

Prospects.—No signs of improvement. No improvement possible until the causes enumerated above are removed. The only redeeming feature is the low price, which enables producers to hold stock easier and with less liability to loss than before, and encourages the hope of increased consumption. With peace, no doubt a great revival of trade would take place, which, by increasing employment for the working classes everywhere, would enable consumers to increase their expenditure in clothing. Aside from this, Alsace also wants the establishment of import duties equal to those of France, as a protection against English competition.

AUSTRIA.

Past Season.—Favorable during the first three or four months, owing to advancing prices, good demand and rising exchanges; but unfavorable during the remainder of the season, owing to declining prices, diminished demand, and falling exchanges. On the whole there has been a fair sale of goods, and stocks have not accumulated very much, but prices have been very unsatisfactory, owing to the competition of English imports, which have been forced off at low rates.

About 15,000 new spindles have come into work, but a mill with 12,000 has been burnt. The consumption of cotton has diminished about 5 per cent in some districts, but has been well maintained in others. Average reduction perhaps $2\frac{1}{2}$ per cent. Spinners have gone on to lower counts of yarn, owing to foreign competition in the higher counts. The stocks of cotton are larger at some mills, but smaller at others, than last year. The stocks of yarns are moderate. The stocks of goods are smaller at some mills, but much larger at others; on the whole, possibly a little heavier than last year.

Prospects.—The outlook is not good. The favorable anticipations based upon the bountiful harvest have not been realized. The recent rise in cotton has not been followed by a corresponding advance in yarns and goods. Any movement of moment in this respect has been prevented by the competition of English imports. The result is that producers are working at a loss. One of our correspondents says "spinning of high counts does not pay, and requires a higher protective tariff. Low numbers and waste spinning pays, and has largely increased." Another says—"The Eastern War, uncertainties of present situation, and absence of demand from those countries; effects of the crisis since 1873; differences in Austrian and Hungarian commercial

and financial relations ; and dissatisfaction of spinners requiring higher protective duties,—sadly disturb business.”

SWITZERLAND.

Past Season.—Very unsatisfactory. Production constantly in excess of demand. Demand slow, owing to the influence of the war in the East ; general political uneasiness ; the competition of English products in our home market, and in those of our foreign customers ; and the diminished buying by consumers who have suffered heavy losses in home railways and other speculative investments.

No increase in spindles. The consumption of cotton has been reduced from 5 to 10 per cent. The stock of cotton at the mills is reduced to a minimum, stocks of yarns slightly, those of goods considerably larger than last year.

Prospects.—Very unpromising. No chance of improvement until the war is at an end. Switzerland usually does a large business with the East of Europe, but at present this is seriously reduced. Improvement at home will increase slowly, as the losses entailed by unfortunate investments are gradually made up. With peace and a general revival of trade, it is expected that English products will find profitable outlets elsewhere, and, therefore, that the competition here will be diminished.

BELGIUM.

Past Season.—Unsatisfactory throughout the year; the cotton industry having suffered from the general distress experienced during the past three years.

No increase in spindles. The consumption of cotton has been 5 to 15 per cent below full rate. The stocks of cotton at the mills are reduced to not more than half the quantity held last year. The stocks of yarns and goods are nearly double what they were a year since.

Prospects.—The position is bad, and the outlook not brilliant. In ordinary times, when the price of the raw material is low, the consumption of cotton goods would increase, but the present times are bad, and it is to be feared that the general depression will continue for a while.

HOLLAND.

Past Season.—Unfavorable owing to the generally unsatisfactory state of trade in Europe, caused by the slow recovery from the effects of the last financial crisis, and by the unremunerative condition of the business with India and China—particularly with Java, where the stocks of goods are heavy. Spinners have not done badly, except a few who, in the winter months, bought largely of cotton at high prices ; but the season has been very unprofitable to weavers, owing to their being constantly ham-

pered by excessive stocks, which they have had to force off at losing prices.

No increase in spindles. The consumption of cotton has not varied materially from last season. The stocks of cotton at the mills are smaller than last year. The stocks of yarn are also smaller, but those of goods are much larger.

Prospect s.—Unfavorable, and no indication of any improvement, as the stocks of goods everywhere are excessive.

FRANCE.

Past Season.—Unsatisfactory, owing to the dragging trade caused by the apprehensions arising out of unsettled politics abroad and at home; while matters have been made still worse by the continued competition of Manchester goods.

There is no increase in spindles; a few thousands of new ones have been put to work, but there have been counterbalancing losses of others by fires. In some places attempts were made during the year to reduce consumption, but they were shortly abandoned, and the weight of cotton spun has probably not been much short of a full rate of consumption. The stocks of cotton at the mills are about the same as last year. The stocks of yarns and goods are very much larger.

Prospects.—The present situation is bad, but a better state of things is anticipated after the settlement of the present political agitation, which upsets every department of business. The change is more likely to occur because the prices of goods have never been so low as they are now. But a substantial revival cannot be expected until the Russo-Turkish war is over.

SPAIN.

Past Season.—Unsatisfactory on account of general depression in all branches of trade, and the consequent difficulty of selling except at irregular and unremunerative prices.

Increase in spindles, 25 000 to 30,000; but this increase is counterbalanced by short time in some quarters, and the entire stoppage of mills in others owing to insufficient water supply. On the whole, less cotton consumed this season than last. Stocks of cotton at the mills less than last year. Stocks of yarns and goods larger, especially the latter.

Prospects.—Unpromising, in consequence of the continued absence of enterprise. The chances of improvement are uncertain also, owing to the proposed change in the customs and excise duties. The industry of the country is suffering from the effects of the late civil war.

ITALY.

Past Season.—Unsatisfactory, owing to the reduced consumption occasioned by the partial failure of the grain and silk crops, and the almost total failure of the olive crop; to the competition

of English goods; and to the bad state of trade in general, arising out of the war in Turkey, and the unsettled condition of politics.

The number of spindles is increased by about 80,000. Except a few mills temporarily stopped owing to want of water, there has been no "short time;" but it is doubtful whether the increase in consumption has been in the same ratio as the increase in spindles. Weavers have, in many instances, reduced their production 10 to 20 per cent. The stocks of cotton at the mills are smaller, but those of yarns and goods are much larger than last year.

Propects.—The position remains as bad as during the past season, and there is little chance of any improvement until steps are taken to limit the competition of English goods. Peace might reduce this evil, by diverting Manchester fabrics to other markets; but the remedy really required is an increase in the import duties.

THE CONSUMING POWER OF EUROPE AND THE UNITED STATES.
REQUIREMENTS FOR 1877-78.

In round numbers there are in Great Britain $39\frac{1}{2}$ million spindles, on the Continent $19\frac{1}{2}$ millions, and in the United States 10 millions. The following is a statement of the consuming power of this machinery :

	Number of Spindles.	Lbs. per Sp'dle	Total lbs.	Bales of 400 lbs.	Av. per week.
Great Britain..	39,500,000	33	1,303,500,000	3,258,000	62,600
Continent	19,500,000	53	1,033,500,000	2,584,000	49,700
Total Europe..	59,000,000	40	2,337,000,000	5,842,000	112,300
United States..	10,000,000	63	630,000,000	1,575,000	30,300
Grand total..	69,000,000	43	2,967,000,000	7,417,000	142,600

Judging from the experience of the past few seasons, the spinners of the United States will require for 1877-78 about 1,500,000 bales of 438 lbs., or about 1,640,000 bales of 400 lbs. What Europe will require will depend upon the course of politics in connection with the war, and upon the chances of a recovery from the present unsatisfactory state of trade in all departments of industry. With peace we should no doubt see an extraordinary revival in business, but with continued war and political disquietude we may witness a repetition of the dragging trade experienced during the past season. The full requirements of Europe compare as follows with the actual consumption for the past season :

	Great Britain. Pounds.	Continent. Pounds.	Total. Pounds.
Estimated full requirements	1,303,500,000	1,033,500,000	2,337,000,000
Consumption past season....	1,273,256,000	979,895,000	2,253,151,000
Average.....	1,288,378,000	1,006,697,000	2,295,078,000
Bales of 400 pounds.....	3,221,000	2,517,000	5,738,000
Average per week.....	62,000	48,000	110,000

For the coming season, therefore, Europe will require at least 110,000 bales of 400 lbs. per week, and may want more.

PROSPECTS OF SUPPLY.

Two or three months ago estimates of the probable yield of the American crop mostly varied between $4\frac{1}{2}$ and $4\frac{3}{4}$ million bales; since then the prevalence of caterpillars in some districts, drought in others, and the recent occurrence of heavy rain-storms in all, have reduced the figures by at least a quarter of a million of bales, and now the estimates current range from $4\frac{1}{4}$ to $4\frac{1}{2}$ millions. The actual result depends upon the weather during the remainder of the season. Of this, of course, no one can speak positively, but as the crop is some two or three weeks late, the risk of serious injury from frost is correspondingly increased. Under the circumstances, $4\frac{1}{2}$ millions is considered a full estimate. Supposing this figure to be attained, American spinners will take about 1,500,000 bales, leaving 3,000,000 for shipment to Europe.

Last season the import of cotton into Europe from India reached only 1,133,000 bales, against 1,220,000 in 1875-6, and 1,544,000 in 1874-5. The following estimate shows that 1,250,000 bales would be a full estimate of the probable receipts for the new season:

	1877-78.	1876-77.	1875-76.	1874-75.
Afloat commencement of season	123,000	219,000	301,000	269,000
Shipments Oct. 1 to Sept. 30 ..	1,309,000	1,009,000	1,204,000	1,576,000
Supply.....	1,432,000	1,258,000	1,505,000	1,845,000
Afloat end of season	182,000	123,000	288,000	301,000
Import into Europe, Oct. 1 to Sept. 30.....	1,250,000	1,135,000	1,220,000	1,544,000

The estimated increase in shipments is 300,000 bales. The increase is hardly likely to be any more than this, and it may be less. As the bulk of the increase will be late in the year, the amount afloat at the close of the season will be much larger than at the opening.

From Egypt we shall probably get about 450,000 bales, against 443,000 last season. From the Brazils probably not more than 400,000 bales, against 444,000, the accounts from that quarter reporting injury to the crop by drought. Sundry Mediterranean sources may supply 100,000 bales, against 107,000. From Peru,

the West Indies, etc., we may receive about the same as last year, say about 90,000 bales.

A recapitulation of the foregoing gives the following as the probable import into Europe, in bales and pounds, in 1877-78 :

	Bales.	Weight.	Pounds.
American	3,000,000	438	1,314,000,000
East Indian	1,250,000	378	472,500,000
Egyptian	450,000	601	270,450,000
Brazilian	400,000	164	65,600,000
Sundry Mediterranean	100,000	350	35,000,000
Peru, West Indies, &c.	90,000	205	18,450,000
Total	5,290,000	411	2,176,000,000

SUPPLY, DEMAND AND PRICES.

We have shown above that on a moderate computation the consumption of Europe in 1877-78 will reach :

	Pounds.
For Great Britain	1,288,000,000
And for the Continent	1,006,000,000
Or a total of	2,294,000,000
To meet which we have a supply of	2,176,000,000
Showing a deficit of (295,000 bales of 400 lbs.)	118,000,000

If the consumption should not exceed that of the past twelve months, the case will stand as follows :

	Pounds.
Consumption of Great Britain	1,273,000,000
Consumption of the Continent	980,000,000
Total	2,253,000,000
Estimated supply as above	2,176,000,000
Deficit (192,000 bales of 400 lbs.)	77,000,000

So that with a rate of consumption that pre-supposes a continuance of bad trade, and with a supply that includes an American crop of 4,500,000 bales, and an increase of 300,000 bales in the shipments from India, we have to face a deficit of 192,000 bales of 400 lbs. each. Besides this there is, compared with last year, a reduction of 167,000 bales in the stocks in the ports, and fully 150,000 bales in the stocks at the mills, or a total of 317,000 bales.

With a smaller prospective supply than even the retarded consumption of last season, we must, in the ordinary course of events, look for a higher range of prices in 1877-78 than ruled in 1876-77. At the end of September, 1876, the price of middling upland was $5\frac{3}{4}$ d. In our annual report we stated that we looked for an advance during the course of the season. The average for the season was $6\frac{1}{4}$ d., and the closing price $6\frac{3}{4}$ d. Unless the war spreads, the average for 1877-78 will not be lower than in 1876-77; how much higher will depend mainly upon the outturn of the American crop. A yield of four and three quarter

millions might prevent any rise of importance, but in the absence of any new political misfortune, such a crop would not lead to any average decline worth mentioning; while with peace four and three quarter millions would be found too small for the wants of the world.

At the moment, the strong statistical position of the raw material is weakened by the knowledge that the stocks of goods are large, that the position of producers is very unsatisfactory, that general trade shows no signs of revival, and by the fear that new political complications may arise out of the Eastern war. These weakening influences may continue in operation for some time, and with sufficient force to retard or prevent the advance in prices that would be inevitable if cotton was on its own merits. But, taking a broad view of the situation, it would appear that, whatever may be the extent of the fluctuations in the course of the twelve months, the average price of middling upland is more likely to be over than under that of the past season.

Mr. Ellison, in his 1st of January circular, says that the consumption in Great Britain in 1877 was nearly 3 per cent less than in 1876, and at least 5 per cent less than the full rate; that on the Continent the average rate of consumption the last three months of 1877 has been over 16 per cent short of the full spinning power. He estimates the requirements for 1878 at about 7 per cent below the full working power, and gives the following as a minimum estimate of the requirements of Europe for 1878.

	Pounds.	Per Cent.	Bales.	Per Week.
Great Britain....	1,275,000 0	56 3	3,187.5 0 of 400 lbs.	61.00
Continent.....	974,000 0	43.7	2,425.0 0 of 400 lbs.	46.60
Total	2,245,000,000	100.0	5,612,500 of 400 lbs.	107.9 0

We now add our report of the United States crop for 1876-77.

COTTON MOVEMENT AND CROP OF 1876-77.

Our statement of the cotton crop of the United States for the year ending Sept. 1, 1877, will be found below. It will be seen that the total crop for the year ending that day reaches 4,485,423 bales, while the exports are 3,049,497 bales, and the spinners' takings 1,435,418 bales, leaving a stock on hand at the close of the year of 119,638 bales. The tables which follow show the whole movement for the twelve months. The first table indicates the stock at each port, Sept. 1, 1877, and the total on Sept. 1, 1876, the receipts at the ports for each of the last two years, and the export movement for the past year (1876-77) in detail and the totals for 1875-76.

PORTS.	Receipts year ending		Exports year ending Sept. 1, 1877.					Stock, Sept. 1, 1877.
	Sept. 1, 1877.	Sept. 1, 1876.	Great Britain	Channel.	France	Other foreign.	Total.	
Louisiana...	1,195,035	1,475,959	665,225	26,104	333,325	179,937	1,224,591	21,356
Alabama...	364,918	374,672	142,153		29,758	46,492	218,403	2,446
So. Carolina	468,21	416,372	23,312	10,602	50,679	73,087	237,680	2,898
Georgia	491,811	524,855	204,605	5,750	14,887	73,498	298,740	1,963
Texas	506,634	488,641	110,092	16,65	24,774	26,719	258,235	4,788
Florida.....	23,089	17,444	1,36				1,362	6
" Carolina	138,987	107,836	20,484	2,773	2,511	10,606	36,374	196
Virginia ..	575,941	529,226	116,559	3,68	1,60		121,848	1,988
New York*..	121,234	198,693	358,148	29,83	9,368	36,524	434,186	67,462
Boston*....	100,206*	71,326*	75,29				75,310	13,747
Philadelphia*	45,21*	36,826*	30,011			893	30,84	2,081
Baltimore*	7,81*	6,27*	16,892			15,44	32,36	640
Portland*...	4,105*	3,066*						
S. Francisco	.....	.....	415				45	
Tot. this yr	4,038,41	.....	1,024,877	14,700	466,704	463,316	3,019,497	119,638
Tot. last yr	.....	4,191,142	2,040,311	68,577	455,872	646,884	3,222,994	121,380

* These figures are only the portion of the receipts at these ports which arrive overland from Tennessee, &c. The total receipts at New York, Baltimore, Boston and Philadelphia, for the year ending August 31, 1877, are given in a subsequent part of this report.

By the above it will be seen that the *total receipts at the Atlantic and Gulf shipping ports* this year have been 4,038,141 bales, against 4,191,142 bales last year. If now we add the shipments from Tennessee and elsewhere direct to manufacturers, we have the following as the crop statement for the two years:

	—Year ending Sept. 1—	
	1876-77.	1875-76.
Receipts at the shipping ports.....bales	4,038,141	4,191,142
Add shipments from Tennessee, &c., direct to manufacturers.....	300,282	333,146
Total.....	4,338,423	4,524,288
Manufactured South, not included in above..	117,000	115,000
Total cotton crop for the year, bales.	4,455,423	4,669,288

The result of these figures is a total of 4,455,423 bales as the crop of the United States for the year ending August 31, 1877.

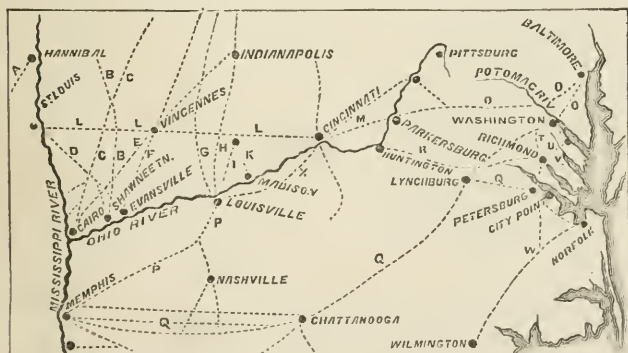
Overland and Inter-State Movement.

To prevent any misunderstanding of our overland movement we give a brief explanation of it. In studying these figures, however, and, in fact, every other portion of our crop statement, it must be remembered that it has always been our plan to *count each bale of cotton at the Southern outport where it first appears*. This is a simple rule, applying to every part of our annual cotton crop report. We in this way not only preserve the unity of the report, and therefore simplify it, but, as a consequence, also make it more intelligible, and less liable to error. Hence, in the overland statement, the reader will find *three* classes of deductions from the gross amount carried overland.

First, all cotton shipped by rail from Southern outports to the North. For instance, from New Orleans, Mobile, Savannah, &c., frequent shipments are thus made, an account of which is kept, but it is all included in the crop of New Orleans, or Mobile, or Savannah, &c., as the case may be, when it first appears there, and therefore when the same cotton appears again in the overland, it must of course be deducted, or it will be twice counted.

Second, we deduct from overland likewise the small amounts taken from the Southern outports for Southern consumption. They also, for the sake of unity and simplicity, are counted at the outports where they first appear. But, as is well known, the entire Southern consumption is made up in an item by itself, and added to the crop. Hence, unless these small lots which thus go into Southern consumption from the Southern outports, are deducted somewhere, they will be twice counted.

Third, we also deduct the arrivals, during the year, by railroad from the West and South, at New York, Boston, Baltimore, Philadelphia and Portland. Those receipts reached these ports by coming across the country, and appear in the weekly totals, becoming a part of the receipts at the ports, under the heads of "New York" and "Other Ports," but now have been divided up and included under each separate city, according to the amount thus received by it during the year, as indicated in the first table of this report. All this cotton, then, having been counted during the year, must now be deducted as has been done.



- | | |
|---|--|
| A Mo. Kan. & Texas RR. connection. | O Baltimore & Ohio RR. |
| B Springfield & Ill. Southeast RR. RR. | P Louisville & Nash. RR. and Memphis Branch. |
| C Illinois Central RR. and branches. | Q Through route Memphis to Norfolk. |
| D St. Louis & Southeastern RR. (from Shawneetown and Evansville.) | R Chesapeake & Ohio RR. |
| E Cairo & Vincennes RR. | T Orange Alexandria & Manassas RR. |
| F Evansville & Crawfordsville RR. | U Washington route, via Richmond |
| G Columbus & New Albany & Chic. RR. | V Fredericksburg & Potomac RR. |
| H & K Jeffersonville Madison & Indianapolis RR. and Madison Branch. | W Richmond Chesapeake & York River Railroad. |
| I Ohio & Miss. RR., Louisville Branch. | X Southern route from Richmond and Norfolk. |
| L Ohio & Miss. RR., main line. | |
| M Connections in Ohio of the Baltimore & Ohio RR. | |

By examining the preceding diagram, and with the aid of previous explanations, nothing further will be needed to explain the following statement of the movement overland for the year ending September 1, 1877:

Shipments for the year from St. Louis.....	212,651
Carried North over Illinois Central Railroad from Cairo, &c.....	48,429
Carried North over Cairo & Vincennes Railroad.....	65,586
Carried over Mississippi River above St. Louis.....	37,298
Carried North over St. Louis & Southeastern, less deductions.....	.....
Carried North over Evansville & Crawfordsville, less re-shipm'ts.....	13,874
Carried North over Jeffersonville Madison & Indianapolis RR.....	117,365
Carried North over Ohio & Mississippi Branch.....	48,623
Shipped through Cincinnati by Louisv. Cincinnati & Lexington RR.....	36,614
Receipts at Cincinnati by Ohio River.....	47,612
Shipped to mills adjacent to river and to points above Cincinnati.....	8,834

Total carried overland.....636,886

Deduct—

Receipts overland at New York, Boston, Philadelphia, Baltimore and Portland.....	278,613
St. Louis shipments to Louisville, New Orleans, &c.....	3,876
St. Louis receipts from Cairo, &c.....	1,386—283,875
Southern consumption and shipments inland from*—	
Galveston.....	.....
New Orleans.....	4,994
Mobile.....	129,212
Savannah.....	2,592
Charleston.....	.....
North Carolina ports.....	5,993
Virginia ports.....	11,250—154,041
Less shipments inland heretofore deducted—	
Mobile from New Orleans.....	862
New Orleans from Mobile.....	85,403
Savannah from Mobile, &c.....	10,624
Charleston from Savannah, &c.....	743
Norfolk from Wilmington.....	3,680—101,312— 52,729

Total now to be deducted.....336,604

Leaving the direct overland movement not elsewhere count'd.300,282

* As previously stated, these items are deducted—(1) so that "Southern Consumption" can be added to the crop in one item; (2) because "Shipments Inland" have once been counted as receipts at the ports named.

According to the above, the total carried overland this year was 636,886 bales, against 703,780 bales last year, and the movement direct to manufacturers this year reaches 300,282 bales, against 333,146 bales a year ago. This shows a decrease over last year of 66,894 bales in the *gross* movement, and of 32,864 bales in the *net* movement. We now give the details of the entire crop for the two years:

Louisiana.

	1876-77.	1875-76
Exported from N. Orleans:		
To foreign ports.....	1,201,591	1,363,005
To coastwise ports.....	188,003	212,375
To Northern ports by rail and river.....	4,398	7,601
Burnt, manufactured, &c.	813	1,976
Stock at close of year....	21,356—1,119,191	29,107—1,611,361
<i>Deduct:</i>		
Received from Mobile....	85,103	67,632
Received from Florida....	221	370
Received from Galveston and Indianola.....	109,125	120,117
Stock beginning of year.	29,107— 224,156	9,986— 198,105
Total product for year....	1,195,035	1,415,959

Alabama.

Exported from Mobile:*		
To foreign ports.....	218,703	213,683
To coastwise ports.....	141,536	127,935
Burnt and manufact'd....	312	308
Stock at close of year....	2,156— 366,097	4,227— 376,153
<i>Deduct:</i>		
Receipts from N. Orleans	862	559
Stock at beginning of year.....	4,227— 5,089	922— 1,181
Total product of year.....	360,918	371,672

* Under the head of coastwise shipments from Mobile are included (in addition to the amount shipped to and deducted at New Orleans) 40,533 bales shipped inland by rail, which will be found deducted in the over-land movement.

Texas.

Exported from Galveston, &c.:		
To foreign ports, (except Mexico).....	256,923	235,364
To Mexico.....	1,307	1,085
To coastwise ports.....	219,079	251,951
Burnt and manufact'd....		
Stock at close of year....	4,768— 512,082	5,345— 493,715
<i>Deduct:</i>		
Received from N. Orleans	103	.....
Stock at beginning of year.....	5,345— 5,448	5,105— 5,105
Total product for year....	506,631	488,610

* Coastwise exports are made up as follows: 238,886 bales from Galveston; 9,933 bales to New Orleans from Indianola; 260 bales from Brazos Santiago, of which 158 were to New York and 102 to New Orleans.

Florida.

Exported from Fernandina, &c.:		
To foreign ports.....	1,362	.....
To coastwise ports.....	21,732	17,432
Stock at close of year....	6— 23,100	11— 17,413
<i>Deduct:</i>		
Stock at beginning of year.....	11— 11	9— 9
Total product of year.....	23,089	17,431

* These figures represent this year, as heretofore, only the shipments from the Florida *outports*. Other Florida cotton has gone inland to Savannah, Mobile, &c., but we have followed our usual custom of counting that cotton at the *outport where it first appears*.

Georgia.			
	1876-77.		1875-76.
Exported from—			
Savannah:			
To foreign ports—Upland	289,560		368,841
To foreign ports—Sea Isl.	1,138		1,374
To coastwise ports—Upland	193,613		165,898
To coastwise ports—Sea Island	4,733		5,493
Brunswick:			
To foreign ports—Upland	7,842		.....
To coastwise ports—Upland	6,876		1,449
Burnt	1,261		25
Stock close of year—Upland	1,869		2,858
Stock close of year—Sea Island	99—	506,991	181— 546,122
<i>Deduct:</i>			
Received from Mobile and New Orleans	10,624		13,505
Received from Beaufort, Charleston, &c.	48		1,623
Received from Florida—Upland	864		976
Received from Florida—Sea Island	616		4,292
Stock beginning year—Upland	2,858		859
Stock beginning year—Sea Island	181—	15,191	42— 21,297
Total product of year		491,800	524,825

* These are only the receipts at Savannah from the Florida outports, and being counted in the Florida receipts, are deducted here. Besides these amounts, there have also been 11,731 bales Uplands and 3,804 Sea Island, from the interior of Florida, received at Savannah during the year.

South Carolina.

Exported from Charleston, &c.*		
To foreign ports—Upland	331,803	276,694
To foreign ports—Sea Isl.	5,677	5,019
To coastwise ports—Upland	132,573	135,994
To coastwise ports—Sea Island	5,601	3,212
Exported from Georgetown, Beaufort, &c.	473	996
Burnt at Port Royal	486	.....
Stock close of year—Upland	1,949	1,417
Stock close of year—Sea Island	949—	479,511 346— 423,678
<i>Deduct:</i>		
Received from Florida—Upland	134	84
Received from Florida—Sea Island	7,013	3,916

* Included in the exports from Charleston this year are the following exports from Port Royal: To Cork, 51 bales damaged Sea Islands; to coastwise ports, 27,589 bales Upland and 773 bales Sea Island. The collector of the port, in giving us the foreign shipments, states that 6,164 bales additional were cleared for Liverpool in December on the Harvey Mills; but, as our readers are aware, this vessel got on fire, and subsequently the vessel, with 5,978 bales of the cotton, was sent to New York; so, of course, it is not included in the foreign shipments. There appears to have been a loss by the fire of 486 bales.

South Carolina—(Concluded.)

	1876-77.	1875-76.
Received from Savannah, &c.....	743	523
Recovered from bark Disco *.....	1,834	....
Stock beginning of year—Upland.....	1,417	2,443
Stock beginning of year—Sea Island.....	346— 11,487	340— 7,306
Total product of year.....	468,024	416,372

* The Disco cleared from Charleston in December for Havre, but was wrecked on the Pumpkin Hill Breakers. Of her cargo, 1,834 bales of cotton were recovered and brought back to Charleston.

North Carolina.

Exported from Wilmington, &c.:		
To foreign ports.....	36,374	27,267
To coastwise ports.....	100,211	79,779
Taken for consumption..	1,206	1,148
Burnt.....	....	....
Stock at end of year....	396— 138,187	100— 108,294
Deduct:		
Stock beginning of year.	100— 100	458— 458
Total product for year	138,087	107,836

Virginia.

Exported from Norfolk, &c.:		
To foreign ports.....	121,169	108,693
To coastwise ports.....	445,771	412,043
Taken for manufacture..	11,100	10,385
Burnt.....	101	....
Stock at end of year, Norfolk, &c.....	1,908— 580,052	431— 531,552
Deduct:		
Received from Wilmington.....	3,680	1,800
Stock beginning of year.	431— 4,111	626— 2,426
Total product for year....	575,941	529,126

* "Norfolk, &c." exports are made up this year as follows: To foreign ports, all the shipments are from Norfolk, except 4,314 bales to Liverpool from Richmond; to coastwise ports, all the shipments are from Norfolk, except 53,936 bales from Richmond, Petersburg, &c.

Tennessee.

Shipments:		
From Memphis.....	384,169	484,545
From Nashville.....	46,970	51,814
From other places in Tennessee, Mississippi and Texas, &c.....	346,209	349,166
Stock in Memphis and Nashville at end of year	6,241— 783,889	5,812— 891,337
Deduct:		
Shipped from Memphis to New Orleans, &c....	92,947	113,919
Shipped from Memphis, &c., to Norfolk, &c....	95,624	105,562
Shipped from Nashville to Southern ports.....	10,611	17,886
Shipped direct to manufacturers.....	300,282	333,116

Tennessee— Concluded.)

	1876-7		1875-6	
Stock at Memphis and Nashville beginning of year.....	5,812—	505,276	4,546—	575,059
Total shipments to New York, &c.....		278,613		316,278
Add shipments to manufacturers direct.....		300,282		333,146
Total product from Tennessee, &c.*.....		578,895		649,424
* Except the shipments to New Orleans, Norfolk and Charleston, which are included in the New Orleans, Virginia and South Carolina crops.				
Total product detailed above by States, for the year ending Sept. 1, 1877.....				4,338,423
Consumed in the South, not included.....				147,000
Total crop in the United States for the year ending Sept. 1, 1877.....				4,485,423

Consumption North and South.

Our mills have even this year made a further considerable advance in their takings, as may be seen in the following statement of the consumption of cotton during the year, North and South :

Total crop of the United States, as stated above.....bales	4,485,423
Stock on hand, commencement of year (Sept. 1, 1876)—	
At Northern ports.....	76,057
At Southern ports.....	44,323— 120,380
At Providence, &c., Northern interior markets.....	9,661— 130,041
Total supply during year ending Sept. 1, 1877.....	4,615,464
Of this supply there has been—	
Exported to foreign ports during the year.....	3,049,497
Less foreign cotton included...	6,413—3,043,084
Sent to Canada, direct from West.	2,872
Burnt North and South.....	3,597
Stock on hand end of year (Sept. 1, 1877)—	
At Northern ports.....	83,882
At Southern ports.....	35,756— 119,638
At Providence, &c., Northern interior markets.....	10,855— 3,180,046
Total takings by spinners in United States, year ending Sept. 1, 1877.....	1,435,418
Taken by spinners in Southern States, included in above total.....	147,000
Total takings by Northern spinners.....bales	1,288,418

The foregoing indicates that the North and South have together taken for consumption from this crop, 1,435,418 bales. These figures verify our remarks and the Mill returns which we published, showing that the Northern spinners were using increased amounts of cotton this year. We should

remember, however, that increased takings do not of necessity indicate increased yards of cloth manufactured. With cotton at eleven cents per pound the heavier makes become relatively the cheaper, while our export movement to China, Africa and South America runs upon heavy fabrics. Furthermore, as we stated a year ago, low prices are enlarging the uses of this staple. For instance, in worsted and woollen mills and knit goods there has been of late years a constantly increasing proportion of cotton consumed. In these and other ways, the demand for the staple is growing, and especially has this been the case during the past three seasons, as is illustrated by the following statement of the total takings for all purposes at the North and by the mills at the South, for a series of years:

	1872. <i>Bales.</i>	1873 <i>Bales.</i>	1874. <i>Bales.</i>	1875. <i>Bales.</i>	1876. <i>Bales.</i>	1877. <i>Bales.</i>
Taken by Northern mills	977,540	1,063,455	1,177,417	1,067,522	1,211,598	1,283,418
Taken by Southern mills	120,000	137,662	128,26	145,079	145,000	117,000
Total takings from crop	1,097,540	1,201,117	1,305,682	1,212,601	1,356,598	1,400,418

Weight of Bales.

The gross weight of bales and of the crop this year we have made up as follows. We give last year's statement for comparison.

Crop of	Year ending September 1, 1877.			Year ending September 1, 1876.		
	Number of bales.	Weight, in pounds.	Average weight.	Number of bales.	Weight, in pounds.	Average weight.
Texas	506,634	254,163,078	501.67	483,610	245,889,8	503.17
Louisiana,	1,95,35	542,217,131	453.75	1,41,350	659,836,8	466.00
Alabama	350,918	178,838,478	495.51	371,672	180,081,829	503.30
Georgia	491,800	228,195,200	464.00	524,823	243,644,361	464.22
S. Carolina	463,724	212,099,552	457.01	416,372	184,891,168	444.00
Virginia	575,941	267,570,610	464.58	529,16	241,810,782	457.00
N. Carolina	138,087	62,412,522	451.98	107,86	47,232,168	438.10
Tenn., &c.	748,984	355,018,416	474.00	811,858	388,053,124	478.00
Total crop	1,485,433	2,100,463,086	463.28	1,469,288	2,201,410,024	471.6

According to the foregoing, the average gross weight per bale this season was 463.28 lbs., against 471.46 lbs. in 1876, or 3.18 lbs. less than last year, which indicates nearly 7 per cent decrease in weight. Had, therefore, as many pounds been put into each bale as during the previous season, the crop would have aggregated about 31,000 bales less than the present actual total. The weights, however, were unusual last year, as may be seen from the following comparison:

Season of	Crop, number of bales.	Crop, weight, lbs.	Average weight per bale.
1876-77	1,485,433	2,100,463,086	463.28
1875-76	1,469,288	2,201,410,024	471.46
1874-75	1,305,682	1,78,931,765	463.00
1873-74	1,212,601	1,567,422,297	479.00

It should be remembered that the above are gross weights.

Sea Island Crop and Consumption.

Through the kindness of the various receivers and shippers of Sea Island cotton, we are able to continue our annual report of that staple. As our readers are aware, no record is kept of the export movement of Sea Islands except for the ports of Charleston and Savannah. For the Northern ports, Custom House manifests furnish no guide. We have found it impossible, therefore, to perfect these figures except by special correspondence in every case with the consignee or the shipper, and in this way following every bale of Sea Island after it appeared at a Southern outport, until it either had actually been exported or taken for consumption. We should also state that for the shipments of cotton direct from Florida to ports other than Charleston and Savannah, we have in the case of each consignment at the time of its receipt procured from the receivers the exact number of bales of Sea Island received. Hence in the following results thus obtained there is but little room for error:

Florida.

	1876-77.	1875-76.
Receipts at Savannah..bales.	3,032	4,292
Receipts at Charleston.....	7,013	3,916
Receipts at New York.....	1,065	726
Receipts at New Orleans	49	16
Shipments to Liverpool from Florida direct.....	55	....
Total Sea Island crop of Florida.....	11,214	8,950

Georgia.

Receipts at Savannah.....	6,137	7,212
Deduct:		
Received from Florida.....	3,032	4,384
Received from Florida for Charleston.....	1,388	1,523
Received from Beaufort, &c	48— 4,468	92—5,999
Total Sea Island crop of Georgia.....	1,669	1,213

South Carolina.

Receipts at Charleston.....	11,057	8,188
Shipped from Port Royal, coastwise.....	768	435
Receipts at Savannah from Bluffton, &c.....	48	....
Shipped from Beaufort to Great Britain.....	51—11,924	49—8,672
Deduct:		
Received from Florida.....	7,013	3,916
Total Sea Island crop of South Carolina.....	4,911	4,756

Texas.

Receipts at Galveston	29	74	
Receipts at Corpus Christi...	.... 29	3— 77	
Total Sea Island crop of Texas.....	29	77	
Total Sea Island crop of the United States.....	17,823	14,996	

The distribution of the crop has been as follows:

PORTS OF	Supply year ending Sept. 1, 1877.			How Distributed.		Of which exported to		
	Stock Sept. 1 76.	Net Crop.	Total Supply.	Stock, Sept. 1, 77.	Leav'g for dis- trib't'n	Great Britain	Havre	Total ex- ports.
So. Carolina*.	346	4,911	5,257	949	4,308	5,037	610	5,677
Georgia.....	181	1,669	1,850	99	1,751	1,090	48	1,138
Florida.....	.....	11,214	11,214	.....	11,211	55	.....	55
Texas.....	.....	29	29	.....	29	27	.....	27
New Orleans.	.....	.....	.....	.....	41	41	.....	41
New York†.	.....	.....	.....	.....	2,710	681	.....	3,391
Boston.....	.....	.....	.....	.....	411	.....	.....	411
Baltimore.....	.....	.....	.....	.....	2,412	.....	.....	2,412
Philadelphia	.....	.....	.....	.....	52	.....	.....	52
Total.....	527	17,823	18,350	1,018	17,302	11,865	1,369	13,234

* South Carolina exports were all from Charleston, *except* 51 bales to Cork from Port Royal.

† New York exports to Great Britain were all to Liverpool, *except* 53 bales to Glasgow.

From the foregoing we see that the total growth of Sea Island this year is 17,823 bales; and with the stock at the beginning of the year 527 bales, we find—

The total supply has been.....bales. 18,350
The stock at the end of the year, Sept. 1, 1877, was..... 1,018

Making the total distributed..... 17,302
Of which exported to foreign ports..... 13,234

Leaving consumed in the United States..... 4,068

We thus reach the conclusion that our spinners have consumed of Sea Island cotton this year 4,068 bales, less whatever (if any) stock there may be remaining in our Northern ports in excess of last year. Why there has been this very considerable increase in consumption in this country the present season, we are unprepared to state. The following very useful table shows the crops and movement of Sea Islands since the war:

Season.	CROP.					EXP. RTS.			Amer- ican Con- sump- tion.*	Stock, Aug. 31.
	Florida	Geor- gia.	South Caro- lina.	Tex- as.	Total.	Great Britain	Conti- nent.	Total ex- ports.		
1876-77.	11,114	1,699	4,911	29	17,853	11,865	1,369	13,234	4,068	1,448
187-76.	8,950	1,213	4,776	77	14,906	11,591	1,345	12,936	1,955	527
1874-75	8,333	1,110	7,440	904	17,027	13,191	1,907	15,098	2,192	381
1873-74	8,855	1,488	8,759	920	19,912	16,986	1,887	18,873	2,113	563
1872-73	10,761	1,369	13,156	1,101	26,289	22,847	622	23,469	1,523	1,461
1871-72	5,624	1,557	8,755	899	16,845	14,991	493	15,584	1,526	370
1870-71	8,753	4,934	7,218	704	21,609	19,744	61	19,805	1,672	1,335
1869-70	9,918	9,225	7,330	.....	26,507	22,776	1,940	24,716	1,999	603
1868-69	6,703	6,371	5,608	.....	18,682	15,388	1,551	17,339	1,388	211
1867-68	16,401	6,246	4,577	.....	27,224	19,771	152	19,923	1,650	154
1866-67	11,212	10,015	11,401	.....	32,628	30,344	392	30,736	1,557	410
1865-66	2,488	10,957	5,631	.....	19,076	18,086	145	18,231	1,700	485
Total ..	103,136	56,724	89,105	3,933	252,898	217,534	12,244	229,798	22,163	.....

* The column of "American Consumption" in this table includes bales burned in the United States

Movement of Cotton at the Interior Ports.

Below we give the total receipts and shipments of cotton at the interior ports, and the stock on the 1st of September of each year. The shipments in this statement include amounts taken from these interior ports for home consumption:

	Year ending Sept. 1, 1876.			Year ending Sept. 1, 1877.		
	Receipts.	Shipments	Stock.	Receipts.	Shipments	Stock.
Augusta, Ga.	172,592	112,865	635	189,694	184,733	595
Columbus, Ga.	51,883	51,864	494	72,534	72,282	76
Macon, Ga.	54,367	53,470	924	79,412	79,570	468
Montgomery, Ala.	72,527	72,380	959	67,337	67,509	787
Selma, Ala.	82,500	88,278	913	64,339	69,419	324
Memphis, Tenn.	487,316	484,515	5,443	384,358	38,469	5,394
Nashville, Tenn.	50,558	51,814	48	47,500	46,910	940
Total, old ports. .	977,429	975,416	9,748	969,864	910,452	9,161
Dallas, Texas.	49,657	49,376	273	44,104	44,745	130
J. Jefferson, Texas.	40,333	40,149	213	36,925	37,459	80
Shreveport, La.	14,095	104,124	15	17,855	17,797	193
Vicksburg, Miss.	60,784	60,784	1,518	55,048	55,339	227
Columbus, Miss.	21,282	21,226	120	22,042	22,224	40
Eufaula, Ala.	57,078	56,794	300	47,195	47,095	400
Giffin, Ga.	12,712	12,786	30	16,437	16,531	17
Atlanta, Ga.	60,500	60,229	295	90,175	91,211	200
Rome, Ga.	32,551	32,518	53	33,100	33,016	57
Charlotte, N. C.	42,628	42,445	85	48,235	48,357	104
St. Louis, Mo.	24,011	243,064	2,221	219,010	217,519	1,501
Cincinnati, O.	185,376	179,859	6,612	175,527	177,281	4,858
Total, new ports	891,867	883,353	12,079	889,435	891,691	7,879
Total, all. . . .	1,869,296	1,858,769	21,827	1,859,299	1,802,144	17,040

Gross Receipts at New York, Boston, &c.

The following are the receipts of cotton at the ports named :

	NEW YORK.		BOSTON.		PHILADELPHIA		BALTIMORE.	
	1876-77.	1875-76.	1876-77.	1875-76.	1876-77.	1875-76.	1876-77.	1875-76.
New Orleans.	163,392	179,163	15,359	19,168	.....	47	.....	834
Texas.	95,077	94,120	9,007	8,593	2,841	1,227	.....	.....
Savannah.	18,332	16,763	27,777	31,816	22,312	11,610	24,666	18,871
Mobile*. . . . .	.....	4,060	10,895	6,483	.....	.....	.....	.....
Florida.	13,193	7,271	.....	.....	.....	.....	.....	.....
S. Carolina.	106,948	105,167	2,531	1,879	15,263	13,313	19,522	11,138
N. Carolina.	80,061	54,676	.....	.....	7,819	8,947	13,111	21,381
Virginia.	244,800	184,003	82,742	74,019	39,383	46,319	6,148	57,914
Northern port.	1,684	14,091	106,828	87,866	.....	.....	.....	.....
Tennessee, &c.	121,213	193,619	100,206	71,396	45,218	36,226	7,871	6,297
Foreign.	5,918	4,188	.....	4	.....	.....	.....	.....
Total.	959,955	943,491	55,355	301,314	132,776	124,713	126,388	116,415

* There have been shipments for New York, &c., from Mobile, which do not appear in this statement, having been made by railroad, overland.

Exports.

In the first table given in this report will be found the foreign exports the past year from each port to Great Britain, France and other ports, stated separately, as well as the totals to all the ports. In the following we give the total foreign exports for six years for comparison:

Total Exports of Cotton to Foreign Ports for Six Years.

From—	—Exports to foreign ports for year ending Aug. 31.—					
	1872.	1873.	1874.	1875.	1876.	1877.
New Orleans.... bales..	888,976	1,177,058	1,117,314	995,270	1,333,005	1,301,591
Mobile	137,977	132,130	132,567	131,311	213,083	218,743
South Carolina	111,388	161,169	217,865	175,131	281,703	337,450
Georgia.....	295,798	375,891	429,571	433,235	570,218	298,590
Texas.....	116,597	210,438	274,383	224,384	336,440	258,235
Florida .....	.....	.....	835	41	.....	1,362
North Carolina.....	.....	1,632	6,333	15,355	27,267	36,374
Virginia.....	3,807	7,722	20,721	67,212	18,693	121,199
New York.....	373,071	573,498	485,596	475,174	494,774	434,158
Boston	13,128	11,128	25,399	30,259	58,073	75,310
Philadelphia.....	2,106	6,492	28,248	26,090	40,007	30,844
Baltimore	14,311	20,543	41,548	44,567	22,114	32,316
Portland, Maine	143	2,257	352	.....	.....	.....
San Francisco.....	12	34	468	421	304	415

Total from Un. States, 1,957,314 2,679,936 2,810,481 2,684,410 3,212,994 3,019,497

Below we give a detailed statement of the year's exports from each port, showing the direction which these shipments have taken:

To—	New Orleans.	Mo- bile.	Gal- veston.	Char- leston.	Sav'n- nah.	New York.	Ba ti- more.	Other Ports*	Total.
Liverpool ..	665,245	120,618	185,968	201,112	01,605	352,827	16,892	244,043	1,993,290
Cork, Fal- mouth, &c	24,101	21,835	16,650	10,612	19,001	29,813	.....	5,788	119,795
Hull and London ..	.....	.....	.....	.....	.....	5,621	.....	.....	5,621
Fleetwood ..	.....	.....	4,124	.....	.....	.....	.....	.....	4,124
Havre.....	327,010	27,758	21,774	53,679	14,637	9,308	.....	4,112	460,89
Rouen	26,315	.....	.....	.....	.....	.....	.....	.....	6,315
Bordeaux ..	.....	.....	.....	.....	.....	.....	.....	.....	.....
and Dun- kirk	261	.....	.....	.....	.....	.....	.....	.....	261
Bremen	68,651	15,972	19,920	10,590	15,590	15,211	14,766	1,868	162,318
Hamburg ..	86	.....	2,25	2,150	.....	2,878	.....	.....	8,141
Antwerp ..	4,171	.....	.....	.....	.....	1,00	.....	1,608	5,879
Amsterd'm ..	6,911	8,951	.....	15,933	7,829	.....	200	7,963	48,887
Rotterdam ..	2,531	.....	1,213	1,149	.....	836	644	.....	6,881
Reval	19,385	3,800	.....	.....	8,380	11,805	.....	.....	43,270
Cronstadt ..	.....	.....	.....	1,470	3,065	900	.....	.....	18,846
&c.....	11,385	2,025	.....	.....	.....	.....	.....	.....	.....
Göthenb'g ..	.....	.....	.....	.....	.....	.....	.....	.....	.....
&c.....	5,402	956	1,310	3,151	3,270	35	.....	.....	11,117
Barcelona ..	25,874	11,788	.....	3,251	7,01	4,014	14	.....	45,981
Malaga	6,992	.....	.....	1,430	.....	.....	.....	.....	8,412
Santander ..	.....	.....	.....	.....	.....	.....	.....	.....	.....
&c.....	1,000	.....	.....	680	1,495	.....	.....	.....	3,75
Gibraltar ..	2,710	.....	.....	.....	.....	.....	.....	.....	2,710
Genoa, &c ..	17,112	.....	729	780	3,676	500	.....	.....	24,797
Leghorn .....	.....	.....	.....	.....	.....	250	.....	.....	250
Br. No. Am. Province ..	.....	.....	.....	.....	.....	.....	.....	81	81
Mexico.....	6,050	.....	1,307	.....	.....	.....	.....	.....	7,97
W. Indies ..	.....	.....	.....	.....	.....	.....	.....	10	10
Total.....	1,904,591	218,732	254,235	7,480	298,510	434,158	32,316	235,471	3,049,497

* "Other ports" includes the following shipment—

From Florida, 1,555 bales to Liverpool, and 7 to Dundee.
 From Wilmington, 21,414 bales to Liverpool, 2,773 to Cork and Falmouth,
 25,1 to Havre, 1,868 to Bremen, 7,963 to Amsterdam, and 775 to Antwerp.
 From Norfolk, 112,345 bales to Liverpool, 3,08 to Cork, and 1,692 to Havre.
 From Richmond, 4,314 bales to Liverpool.
 From Boston, 73,219 bales to Liverpool, 81 to Nova Scotia, and 10 to other
 foreign ports.
 From Philadelphia, 30,011 bales to Liverpool, and 533 to Antwerp.
 From San Francisco, 415 bales to Liverpool.

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